

WALNUT CREEK SUPPLY

THE COMPLETE CARE GUIDE

# Leopard Gecko

*Habitat, diet, heating and a lifelong commitment — everything for the first year and beyond*



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*New owner? Go straight to Section 1. It is written so you can set up a safe, correct home and get through the first 48 hours without reading anything else first.*

*Leopard geckos have earned their reputation as one of the most rewarding first reptiles in the hobby, but that reputation comes with a catch: the husbandry advice in pet stores is usually a decade behind the science. Tiny enclosures, heat rocks, sand, and no UVB are still sold as a complete setup in 2026. The animals survive — leopard geckos are tough — but surviving and thriving are different things, and this guide is built around the latter. Get the thermal gradient, the three hides, the calcium schedule, and the substrate right, and you will have a personable, curious gecko who walks to the front of her enclosure when she hears you coming and lives well past fifteen years. Read the Quick Start first. The heat-rock rule and the solitary rule save lives.*

## SECTION 1

# Quick Start: Your First 48 Hours

1. **Set up the entire enclosure before your gecko arrives.** A minimum **36" × 18" floor footprint** — equivalent to a 40-gallon breeder tank — with front-opening doors preferred over a top-opening lid. Glass, PVC, or solid-walled enclosures all work; wire-mesh-only enclosures don't hold heat and should not be used.
2. **Establish the thermal gradient and confirm it with a probe thermometer before any animal goes in.** Warm side surface temperature **88–92°F**, warm side air **80–85°F**, cool end air **70–75°F**. Use a calibrated digital thermometer with a handheld IR gun or two probe thermometers — one on the warm surface, one on the cool end floor. A temperature strip stuck to the outside of the glass is not a useful reading.
3. **Connect the heat source to a thermostat — no exceptions.** A halogen lamp or radiant heat panel on a dimmer thermostat, or a deep heat projector (DHP) on a pulse proportional thermostat. An unregulated heat source is how burns happen. **Never use a heat rock:** they develop hot spots that reach dangerous temperatures without warning and have caused countless injuries.
4. **Add three hides before the gecko arrives.** One on the warm end, one on the cool end, one humid hide in the middle or warm side. A gecko with no place to hide cannot thermoregulate without exposure, and the result is a chronically stressed animal who refuses food and hides under the water dish.
5. **Set up the humid hide.** A cave or covered dish large enough for the gecko to turn around, filled two-thirds deep with **damp sphagnum moss or coconut coir** — moist enough to hold shape in your fist, never dripping wet. This is the primary shed aid and is non-negotiable. Refresh the moss when it dries out, roughly every four to seven days.
6. **Install a low-output UVB lamp** at the appropriate distance for Ferguson zone 1 — a UVI of 0.5–1.0. This recommendation has strengthened significantly in recent years: UVB measurably improves bone density and natural behavior in leopard geckos even though many are kept without it. A 5.0 or 6% T5 HO tube at roughly 12–15 inches from the basking zone achieves the right index. Photoperiod 12 hours on / 12 hours off.
7. **Add a shallow water dish on the cool end.** Heavy enough to resist tipping, wide enough to soak in. Leopard geckos drink from standing water. Refresh daily.
8. **Place the gecko in her enclosure and leave her alone for three to five full days.** No handling, no feeding attempts, no tapping the glass, no moving furniture. A gecko who arrived stressed needs to learn her thermal gradient and her hide locations before she can do anything else. Food and water checked quietly once a day.
9. **Offer the first meal on day three or four,** using appropriately sized dubia roaches or crickets. If she doesn't eat, that's completely normal the first week. Do not offer waxworms as a first food — they are addictive and difficult to wean off.
10. **Find your exotic animal vet before you need one.** Not every clinic is comfortable with reptiles, and a gecko who looks vaguely off on Monday can be in serious trouble by Wednesday. Call ahead, confirm they see lizards, and tape the number to the side of the enclosure.

## First-Time Starter Bundle

What needs to be in the house on day one, and what to look for in each category.

### Essentials

- **An enclosure with the right floor footprint** — 36" × 18" minimum for one adult, front-opening preferred, solid walls, secure top mesh for ventilation. Glass terrariums, PVC reptile enclosures, and custom wooden builds all work well. Height matters less than floor space; 12–18 inches of height is plenty.
- **An overhead heat source on a thermostat** — a halogen flood bulb, a radiant heat panel, or a deep heat projector wired to a quality dimmer or pulse proportional thermostat. The thermostat probe goes on the warm side floor surface where the gecko basks.
- **A supplemental deep heat projector or under-tank heater for the substrate warmth layer** — DHPs emit infrared C that penetrates substrate and mimics solar ground warming. If using an under-tank heater as a secondary source, it must also be thermostat-regulated and should only supplement, not replace, overhead heat.
- **Two calibrated digital thermometers with probes** — one on the warm side floor, one at cool-end floor level. A handheld infrared temperature gun is enormously useful for spot-checking surface temperatures.
- **A Ferguson zone 1 UVB fluorescent tube** — a T5 HO 5.0 or 6% lamp, appropriately positioned. Replace bulbs on schedule (every 12 months for most T5 HO reptile UV tubes) even when the visible light looks fine, because UV output degrades before the lamp visibly dims.
- **Three hides** — warm-side hide, cool-side hide, and a humid hide. Humid hide should be a covered cave or modified food-safe container with an entry hole cut in the side. Smooth interior surfaces, sized so she can turn around but not rattle around with excess room.
- **Sphagnum moss or coconut coir for the humid hide** — plain, chemical-free, rinsed before first use.
- **Substrate appropriate to the gecko's age** — paper towel or non-adhesive shelf liner for quarantine and juveniles under six months; flat ceramic or slate tile, or a bioactive soil mix, for healthy adults.
- **A shallow ceramic or stone water dish** — cool side placement, heavy base.
- **Insect feeders** — dubia roaches, crickets, or black soldier fly larvae as staples. Source from a reputable feeder supplier, never from the wild.
- **Calcium supplement (without D3)** — a fine powder in a small bottle cap placed in the enclosure for self-dusting, and for deliberate dusting onto feeders at most meals.
- **Calcium with D3 plus a multivitamin** — used on a weekly rotation alongside plain calcium.

*Ready to set up? Browse the essentials in our collections: [Reptile and Amphibian Enclosures](#) and [Reptile and Amphibian Terrarium Supplies & Accessories](#).*

### Enrichment

- **Low cork bark flats and cork rounds** — visual barriers and resting ledges, nothing high enough to fall from. Leopard geckos are ground-dwelling but will investigate and shelter under low furniture.
- **Slate or flagstone tiles** as surface variation — holds warmth from overhead heat, gives different textures underfoot, and looks appropriately arid.
- **Artificial or dried succulent plants** for coverage — visual complexity reduces stress in a gecko who can see the full length of her enclosure. Live plants are fine if they can tolerate the low humidity.

- **A second hide style** — variety in shape and material (ceramic, natural cork, half-log) so the gecko can choose based on mood.
- **A shallow feeding dish** for mealworms or BSFL if you offer them — prevents feeders from burrowing into substrate or escaping.
- **A sturdy travel carrier** for vet trips, sized so the gecko fits comfortably with a hide inside.

*Enrichment, one click away. Shop Reptile and Amphibian Accessories.*

## SECTION 2

# Meet Your Leopard Gecko

Wild leopard geckos (*Eublepharis macularius*) live across a broad arc of South and Central Asia — Afghanistan, Pakistan, northwestern India, and parts of Iran — in rocky arid scrub, dry grassland, and the rubble-strewn hillsides between. It's a landscape of extremes: scorching days, rapidly cooling nights, almost no ambient humidity, and a substrate that ranges from compacted clay to loose rock over hardpan. Leopard geckos navigate these conditions by being deliberate. They emerge in the late afternoon or evening when surface temperatures have dropped to something tolerable, hunt insects methodically, and return underground before the ground refreezes at night. Every aspect of their biology is built around that rhythm.

| Trait            | Detail                                                                             |
|------------------|------------------------------------------------------------------------------------|
| Common name      | Leopard gecko                                                                      |
| Scientific name  | <i>Eublepharis macularius</i>                                                      |
| Native range     | Afghanistan, Pakistan, northwestern India, Iran                                    |
| Wild habitat     | Rocky arid scrub, dry grassland, clay rubble hillsides                             |
| Adult length     | 7–10 inches total length (snout to tail tip)                                       |
| Adult weight     | 45–90 g; females typically 45–70 g, males 55–90 g                                  |
| Typical lifespan | <b>15–20 years</b> with good care; 20+ in exceptional husbandry                    |
| Activity pattern | Crepuscular and nocturnal — active at dusk, evening, and early night               |
| Social structure | <b>Strictly solitary</b> — no cage mates for beginners; never house males together |
| Temperament      | Docile, unhurried, tolerates calm handling well with time                          |
| Unique trait     | Moveable eyelids — unlike most geckos, they can blink                              |

## Crepuscular rhythm and what it means in the home

Most people bring a leopard gecko home and are puzzled by an animal who spends the entire day motionless under a hide. This is correct, healthy behavior. Leopard geckos are **crepuscular** — most active at dawn and dusk — with their real activity window running roughly from an hour before sunset until a few hours after. A gecko who is out, moving, and exploring at nine in the evening is doing exactly what leopard geckos do. One who is active at noon is either thermoregulating urgently or stressed.

This makes the species a good fit for working adults and families who are home in the evening. It also means you don't need to reach into the enclosure during the day to see your gecko at her best — sit beside the enclosure in the late afternoon and she'll usually come out on her own terms.

## What surprises new owners

The lifespan figure surprises almost everyone. Fifteen to twenty years is not uncommon in well-kept leopard geckos, and it is not a theoretical ceiling — it is the realistic expectation for a gecko whose thermal gradient, calcium schedule, and diet are correct from the start. That means a gecko adopted today will likely still be with you when a child starting kindergarten is in high school. Breed accordingly.

The second surprise is appetite variability. Adult leopard geckos can and do go off food for weeks in autumn and winter, corresponding to the seasonal slow-down in their native range. A gecko who was eating aggressively every two days may refuse

all food for four to six weeks without being ill. A thin tail is the indicator that distinguishes a fast from starvation; the tail section itself covers this in detail.

The third surprise is shedding — a healthy gecko sheds regularly, turns gray and dull a day or two before, and usually eats the shed skin within minutes of pulling it off. It's normal, it's supposed to happen, and the humid hide is what makes it go smoothly.

## SECTION 3

## Habitat & Enclosure Layout

### Footprint and why floor space outranks height

Leopard geckos are **terrestrial** — they live on the ground, hunt on the ground, thermoregulate on the ground, and sleep on the ground. Height is largely irrelevant. A tall enclosure with a small footprint leaves the floor area cramped and typically means the thermal gradient is compromised. Floor space, by contrast, is everything: a gecko needs enough room to choose her temperature precisely by moving between a warm end and a cool end, and enough territory to feel secure with multiple hide locations that don't overlap her visual field.

The minimum for one adult is a **36" × 18" floor footprint** — the standard 40-gallon breeder tank dimensions. This is a genuine minimum, not a suggested target. A 48" × 18" or larger enclosure is better for any gecko who will spend fifteen years in it. Juveniles can be started in smaller enclosures (24" × 18") and transitioned to the full adult size as they grow, but a large enclosure is never harmful to a small gecko, and most experienced keepers skip the smaller intermediate step entirely.

### Building the thermal gradient

The gradient runs lengthwise, from warm to cool, and every measurement matters. The **warm side surface** — where the basking and primary heat source is positioned, over one-third to one-half of the enclosure floor — should read **88–92°F** at the substrate surface. The **warm side air temperature** at gecko height should be **80–85°F**. The **cool end floor** should read **70–75°F**. At night, when the overhead heat source is off, the enclosure can cool to **68–72°F** — this matches the natural nocturnal temperature drop in their native range and is normal, not problematic, as long as the room doesn't go below 65°F.

The gradient only works if the gecko can move between the two extremes without crossing open exposed space. This is where furniture placement becomes husbandry.

### The three hides and how to place them

Three hides is the minimum. Each serves a different purpose, and none is optional.

**Warm-side hide:** Placed directly over or adjacent to the warmest part of the floor. This is where the gecko digests meals, and where she will spend much of her resting time during colder parts of the day. Keep it snug — barely large enough for her to turn around — because a gecko in a hide that feels three sizes too big doesn't feel hidden.

**Cool-side hide:** On the opposite end of the enclosure, in the 70–75°F zone. This is her retreat when she's thermoregulated, sleeping through the day, or stressed. Having a refuge at both temperature extremes means she is never forced to choose between being at the right temperature and being hidden.

**Humid hide:** The most critical shed aid in the entire setup. Position it at mid-enclosure or on the warm side (the warmth helps keep the moss from going anaerobic). The interior should stay at **70–80% humidity** even when the ambient enclosure runs at 30–40%. Check and mist the moss every few days. A gecko who is about to shed will move into the humid hide for extended periods — this is the moment it earns its place.

### Visual barriers and layout logic

A gecko who can see from one end of her enclosure to the other without obstruction is a stressed gecko. Visual barriers — flat cork rounds, stacked slate, artificial plants — break the sightline and give the animal the equivalent of the rocky clutter in her native habitat. Think of the enclosure floor not as a display stage but as a ground plan where the gecko is always a few inches from cover.

A workable layout, described from warm end to cool end: **warm-side hide** at the back corner of the warm zone; **flat slate basking tile** in front of it under the heat source; **water dish** in the mid-enclosure on a slightly cooler diagonal; **humid hide** at mid-enclosure, accessible from either end; **cork flat or plant** as a visual barrier behind the water dish; **cool-side hide** at the back corner of the cool zone; **open patrol corridor** along the front glass where the gecko walks at dusk.

A low climbing piece — a single flat cork round or a piece of slate propped at a shallow angle — is used by most leopard geckos and adds behavioral complexity. Nothing tall enough to fall from; a leopard gecko who topples from a height can break bones.

## Ventilation

Full-screen mesh tops on glass terrariums give excellent airflow and are the standard for most setups. Cross-ventilation — mesh at both ends or at one end and the top — suits bioactive enclosures well. Avoid sealed lids with a single small vent; the temperature gradient cannot stabilize correctly and humidity can't be managed.

## SECTION 4

# Substrate Guide

The substrate question is one of the most contested topics in leopard gecko husbandry, partly because the hobby's old-guard advice (calcium sand, fine sand) is still sold in stores and still causes impaction deaths. The modern picture is clearer than the debate makes it seem.

| Substrate                                                                         | Best for                                                                     | Performance                                                                                                                                                              | Notes                                                                                                                                     |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Paper towel or shelf liner                                                        | Quarantine, juveniles, sick animals                                          | Easy to inspect droppings, zero impaction risk, sterile                                                                                                                  | Not aesthetically interesting; replace as soiled; excellent while learning the animal                                                     |
| Ceramic tile (unglazed or matte)                                                  | Adults, long-term setups                                                     | Retains radiant heat from overhead source, easy to clean, zero impaction risk, wears nails gently                                                                        | Cut to fit, grout lines harbour waste — full tiles preferred; heavy                                                                       |
| Slate or flagstone tile                                                           | Adults                                                                       | Similar to ceramic, natural appearance, excellent thermal mass                                                                                                           | Can be heavy; irregular edges need smoothing to prevent abrasion                                                                          |
| Bioactive soil mix (coco fiber + organic topsoil + coarse sand, roughly 60:30:10) | Healthy adults in naturalistic setups                                        | Allows natural burrowing behavior, supports live plant roots, excellent long-term option with a proper clean-up crew                                                     | Requires more setup and monitoring; not suitable for juveniles who ingest substrate readily; inspect for impaction risk until established |
| Coco fiber alone (moist)                                                          | Adults, secondary layer                                                      | Low dust, fairly inert, holds shape                                                                                                                                      | Dry coco fiber can irritate airways; keep slightly moist                                                                                  |
| Reptile carpet (paper-based)                                                      | Temporary, travel, hospital setups                                           | Better than loose sand; catches and hides waste; fibers can catch toenails                                                                                               | Replace at first sign of bacterial smell; not a long-term solution                                                                        |
| Coarse calci-sand or reptile calcium sand                                         | <b>Avoid outright</b>                                                        | <b>High impaction risk</b> — especially in juveniles and any gecko with calcium deficiency who licks the substrate; does not safely supplement calcium despite marketing | Banned from this guide                                                                                                                    |
| Fine beach or play sand                                                           | <b>Avoid for all juveniles; avoid outright for any gecko under 18 months</b> | Impaction risk; compacts around humidity; poor thermal properties                                                                                                        | Adults in naturalistic mixed-substrate bioactives may tolerate coarse sand as a minor component; never as a solo substrate                |
| Walnut shell granules                                                             | <b>Avoid outright</b>                                                        | Sharp edges, strong impaction risk, poor thermal properties, used by some as an aesthetic option                                                                         | Not appropriate for leopard geckos at any age                                                                                             |
| Wood chips, orchid bark, or cypress mulch                                         | <b>Avoid outright</b>                                                        | Retains moisture that can cause respiratory issues at 30–40% ambient; toenail catch risk; not a natural analog                                                           | Fine in high-humidity reptile setups; wrong for leopard geckos                                                                            |
| Cedar or aromatic pine shavings                                                   | <b>Never</b>                                                                 | Aromatic oils toxic to reptiles                                                                                                                                          | No safe use case for any reptile                                                                                                          |

**The practical recommendation for most keepers:** paper towel for the first 30 to 60 days while you learn the gecko's behavior, then ceramic tile or slate as a permanent substrate for an adult. Bioactive soil mixes are an excellent long-term upgrade once you understand your specific animal, but they are not beginner-appropriate from day one.

## SECTION 5

## Heat, UVB & Humidity — The 3 Numbers

Getting these three right simultaneously is the whole game in leopard gecko husbandry. Every chronic health problem — metabolic bone disease, poor shedding, respiratory infection, chronic stress — traces back to one or more of these numbers being off.

| Parameter                                | Target value | How to measure it                                                                                                    | What goes wrong when it's off                                                                                                                                |
|------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warm side surface temperature            | 88–92° F     | Infrared temperature gun pointed at basking tile surface; probe thermometer on substrate                             | Too low: gecko can't digest properly, refuses food, slow movement; too high: thermal burns, heat stress, avoidance of warm side                              |
| Warm side air temperature (gecko height) | 80–85° F     | Probe thermometer suspended 2–3 inches above warm side floor                                                         | Below 78°F: thermoregulation incomplete, digestion slow; above 88°F: heat stress risk                                                                        |
| Cool end air temperature                 | 70–75° F     | Probe thermometer at cool end floor level                                                                            | Below 68°F: gecko cannot complete thermal cycle, immune suppression; above 78°F: no true cool end exists, thermoregulation fails                             |
| Nighttime temperature drop               | 68–72° F     | Same probes overnight with lights off                                                                                | Below 60°F: immune risk, respiratory susceptibility; above 74°F: gecko gets no true night cycle                                                              |
| UVB (Ferguson zone 1)                    | UVI 0.5–1.0  | Solarmeter 6.5R or equivalent UV index meter; or follow manufacturer distance guidelines for specific bulb and brand | Too low or absent: reduces calcium metabolism efficiency, slightly increases MBD risk; too high: UV overexposure, eye irritation (uncommon at zone 1 levels) |
| Ambient enclosure humidity               | 30–40%       | Digital hygrometer placed at mid-enclosure away from water dish                                                      | Below 25%: dysecdysis (problem shedding) risk; above 55%: respiratory infection risk                                                                         |
| Humid hide interior humidity             | 70–80%       | Check moss texture — it should feel damp to the touch, clump when squeezed, never drip                               | Too dry: moss fails as a shed aid; too wet: bacterial and fungal growth risk                                                                                 |

### Thermostats — matching the type to the heat source

Not all thermostats work with all heat sources, and using the wrong type is a genuine safety issue.

| Heat source                        | Correct thermostat type                      | Why                                                                                                           |
|------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Halogen flood lamp                 | Dimmer thermostat (proportional)             | Smoothly modulates voltage to maintain surface temperature without flickering                                 |
| Radiant heat panel                 | Dimmer thermostat                            | Same — RHPs work best with smooth voltage regulation                                                          |
| Deep heat projector (DHP)          | Pulse proportional thermostat                | DHPs are designed for pulse control; a dimmer thermostat will void the warranty and may damage the element    |
| Ceramic heat emitter               | Pulse proportional thermostat                | No light output, handles pulsing well                                                                         |
| Under-tank heater (secondary only) | On/off thermostat with probe under substrate | UTHs are low-wattage; on/off is acceptable; probe placement is critical — it must be under the mat, not above |

A **dimmer thermostat** also called a variable/analogue thermostat, controls power by reducing voltage. A **pulse proportional thermostat** cycles power on and off many times per second and is better at maintaining precise surface temperatures over substrate. An **on/off thermostat** is the most basic form — it cuts power entirely when the target is reached, which can cause temperature swings and is unsuitable as the primary controller for high-wattage overhead heat sources.

### The heat rock prohibition

A heat rock — a molded plastic or resin decorative rock with a heating element inside — is not a safe secondary heat source for leopard geckos and has no recommended use in this setup. The heating element distributes unevenly. A gecko resting on a cool section of the same rock simultaneously touching a hot section will receive a contact burn before she registers pain and moves — reptile pain response is too slow to self-regulate on a heat rock surface. The resulting burns present as blistered scales under the belly and legs, and they frequently become infected before the keeper notices. A thermostatted overhead source solves the same problem the heat rock is supposed to solve, without the risk.

## SECTION 6

# Diet & Nutrition



*Dubia roaches and black soldier fly larvae are the gold-standard staples. Hornworms and silkworms add variety and hydration. Mealworms occasionally. All gut-loaded before every feeding.*

Leopard geckos are **strict insectivores** — they do not eat fruit, vegetables, or any plant material. Every nutritional need they have must come from insects, and the quality of those insects determines the quality of the gecko. A gecko fed on improperly gut-loaded crickets her whole life will have deficiencies that don't announce themselves until the damage is significant.

## Feeder insect guide

| Feeder        | Category      | Notes                                                                                                                             |
|---------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Dubia roaches | <b>Staple</b> | Excellent protein-to-fat ratio, low chitin, easy to gut-load, odorless, don't chirp; the single best staple feeder                |
| Crickets      | <b>Staple</b> | High protein, very widely available; need careful gut-loading; chirp and can bite a sleeping gecko — remove uneaten ones promptly |

| Feeder                                         | Category                                   | Notes                                                                                                                                                                                                                                   |
|------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Black soldier fly larvae (BSFL, phoenix worms) | <b>Staple</b>                              | Naturally high in calcium, excellent soft-body nutrition; a good plain offering between supplemented meals                                                                                                                              |
| Hornworms                                      | <b>Occasional treat</b>                    | Very high moisture, soft-bodied, excellent hydration feeder; low fat but grow large fast — feed when small                                                                                                                              |
| Silkworms                                      | <b>Occasional treat</b>                    | Good nutrition, very soft-bodied; pricier and harder to source than dubias                                                                                                                                                              |
| Superworms                                     | <b>Occasional treat — limit carefully</b>  | High fat; a gecko who gets them regularly will often refuse anything else. Use sparingly, no more than once a week, and never for juveniles                                                                                             |
| Waxworms                                       | <b>Occasional treat — very rarely</b>      | Extremely high fat, highly palatable; addictive. One or two as a recovery feeding incentive for an underweight animal; not a regular offering. A gecko hooked on waxworms may fast for weeks before accepting a nutritious staple again |
| Mealworms                                      | <b>Poor staple — use only occasionally</b> | High chitin (hard outer shell), lower nutritional density than dubias or crickets, high fat for their size; common but not a good primary feeder. Occasionally fine as part of rotation; problematic as the only or primary feeder      |
| Wild-caught insects                            | <b>Never</b>                               | Pesticide and parasite risk; the exact same insects from a reputable feeder supplier are safer in every way                                                                                                                             |
| Any plant material, fruit, or vegetables       | <b>Never</b>                               | Leopard geckos are strict insectivores; no plant food                                                                                                                                                                                   |

## Prey size rule

No feeder insect should be wider than the distance between the gecko's eyes. This isn't decoration — an insect too large can cause impaction and in rare cases has been implicated in neurological injury. When in doubt, feed smaller. Juveniles especially are at risk from oversized prey.

## Feeding schedule by life stage

| Life stage                      | Age         | Frequency                          | Portion size                                                          |
|---------------------------------|-------------|------------------------------------|-----------------------------------------------------------------------|
| Hatchling                       | 0–3 months  | Daily                              | 5–8 small feeders (½ inch crickets or small dubia nymphs) per feeding |
| Juvenile                        | 3–6 months  | Daily                              | 6–10 appropriately sized feeders                                      |
| Sub-adult                       | 6–12 months | Every 2 days                       | 8–12 feeders                                                          |
| Adult                           | 12 months+  | Every 2–3 days                     | 6–10 appropriately sized feeders; adjust based on body condition      |
| Gravid female                   | Year-round  | Every 1–2 days                     | Increase protein offering; provide a lay box or egg-laying container  |
| Underweight or recovering adult | Any         | Daily until target weight restored | Softer-bodied feeders; re-evaluate after 30 days                      |

## Calcium and vitamin dusting schedule

Calcium metabolism is the single most important nutritional lever in leopard gecko care, and it requires two separate protocols running in parallel.

| What                                   | When                                                        | Why                                                                                                                                        |
|----------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Plain calcium carbonate powder (no D3) | Most feedings — dust the feeders lightly before offering    | Provides raw calcium for bone maintenance; the small bottle cap of plain calcium powder left in the enclosure lets the gecko self-regulate |
| Calcium with D3 (or D3 separately)     | Once per week                                               | D3 is fat-soluble and accumulates; weekly dosing avoids oversupplementation while ensuring adequate levels for calcium absorption          |
| Reptile multivitamin                   | Once per week, on the same or alternating day as calcium+D3 | Covers trace minerals and vitamins that gut-loading alone may not fully provide                                                            |

**Dusting method:** place feeders in a small bag or cup with a pinch of powder, close it, and gently shake. The insects should be lightly coated — not caked. A gecko eating heavily dusted prey will often wipe her face repeatedly to shed the powder; back off if you see this. A small bottle cap or shallow soda bottle lid with plain calcium powder left in the enclosure at all times lets her self-supplement between meals, a practice widely used by experienced keepers.

## Gut-loading — why it matters more than dusting

**Gut-loading** means feeding the feeder insects a nutritious diet for at least 24 to 48 hours before offering them to your gecko. An insect that arrived from a supplier and was offered immediately has nearly empty nutritional content. An insect loaded with fresh leafy greens, carrot, sweet potato, squash, and a quality dry gut-load mix passes that nutrition to the gecko who eats it.

Good gut-load items: mustard greens, collard greens, dandelion greens, squash, sweet potato, carrot, apple, bee pollen, and a commercial dry gut-load blend. Avoid high-oxalate items like spinach and beet greens as a large part of the load. Change fresh food daily; dry gut-load at all times.

A gecko fed on well-gut-loaded, lightly dusted dubias and crickets on a correct supplement rotation is a gecko with a genuinely strong foundation.

## Hydration

A shallow water dish on the cool end, refreshed daily, is the primary water source. Leopard geckos drink more than many owners expect — check the level daily and note sudden changes in consumption, which can signal illness. Most geckos also benefit from a weekly or biweekly gentle soak in shallow lukewarm water (belly-depth, not deep), which aids hydration before a shed. Keep the water dish clean; standing water grows bacteria quickly at enclosure temperatures.

***Shop the food and supplies:** Browse Reptile & Amphibian Food and Live Feed Delivered!.*

## SECTION 7

## Shedding & the Humid Hide

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A healthy adult leopard gecko sheds her skin roughly every **four to six weeks**, a cycle that compresses to every **three to four weeks** in fast-growing juveniles. Before a shed, the skin becomes visibly dull, faded, or slightly gray — the old and new skin layers are separating. Most geckos reduce or stop eating for a day or two before shedding. Both of these are normal. Do not offer food to a gecko in active pre-shed; many will refuse it, and an unfinished cricket in the enclosure during shed can bite vulnerable new skin.

The shed itself usually happens at night. The gecko pulls the old skin off in pieces — often starting at the head — and eats almost all of it. A full shed absorbed in a single night is a sign that the humid hide is working.

### Dysecdysis — incomplete or stuck shed

**Dysecdysis** (dis-EK-di-sis) is the term for a failed or incomplete shed. It's not a disease in itself but a husbandry signal: the humidity was too low (usually because the humid hide dried out), the gecko is dehydrated, or — more rarely — the animal has underlying illness. Signs include patches of dull gray retained skin several days after the shed should have completed, retained shed on the toes, or a milky cap remaining over one or both eyes.

**Retained shed on toes** is the most common and the most dangerous form. Old shed builds up layer by layer, constricting circulation and ultimately causing the toe to die and fall off. A leopard gecko missing toe tips is almost always a product of repeated dried shed that was never addressed.

**What to do:** fill a clean shallow container with lukewarm water just deep enough to cover the gecko's feet and belly — not deep enough to swim in — and let her soak for 10 to 15 minutes. After soaking, the retained shed usually loosens enough to slide off with very gentle pressure from a damp cotton swab or your fingertip. Use a magnifying glass to check every toe tip carefully, and recheck in good light the following day. If the eye caps remain after two soak sessions, do not attempt to remove them yourself — this is an appointment-worthy issue and a vet can remove them safely without risk to the eye.

**Why you must never peel dry shed.** Dry retained shed is adhered to the underlying new skin. Pulling it before soaking risks tearing the fresh layer, leaving raw tissue open to infection, and causing pain disproportionate to what the gecko's behavior lets you see. Always soak first. Always.

### Refreshing the humid hide

The single most effective shed-failure prevention is making sure the humid hide is genuinely damp on the days leading up to a shed. In a 30–40% ambient humidity enclosure, the moss can dry out in two to four days in warm weather. Check it every time you service the enclosure and mist or remoisten if it no longer clumps. A gecko pre-shed who has access to a properly maintained humid hide will almost always shed cleanly without any intervention from you.

## SECTION 8

## Common Challenges & Solutions

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Leopard geckos are hardy, but specific problems are common enough that every keeper needs to know them before they occur.

### Metabolic bone disease (MBD)

**What you see:** trembling limbs during movement, a rubber-soft lower jaw, difficulty walking, bowing or deformity of the legs and spine, muscle twitching, and in severe cases spontaneous fractures. **Why:** a calcium or D3 deficiency — most commonly from inadequate calcium dusting, insufficient D3 supplementation, an absent or failed UVB source, or a combination. In breeding females, the demands of egg production rapidly deplete calcium stores and MBD can appear faster than in other geckos. **What to do:** correct the supplementation and UVB schedule immediately; offer soft-bodied gut-loaded feeders that are easier to eat. Calcium gluconate oral drops (from a reptile vet) can provide emergency supportive calcium. **When to call a vet:** as soon as you see trembling limbs or jaw softness — MBD is treatable in its early stages and very difficult to reverse in its late ones.

### Impaction

**What you see:** a gecko who has stopped defecating, has a visibly swollen mid-section when viewed from above, is lethargic, and shows no interest in food. A constipated gecko may strain repeatedly with no result. **Why:** ingestion of substrate that the digestive system cannot pass — most commonly loose sand, calcium sand, walnut shell, or large pieces of bark. Can also result from an insect ball in a heavily overfed juvenile, or from a dehydrated gecko who cannot pass normal stool. **What to do:** warm soaks twice daily for 10 to 15 minutes; very gentle belly massage in the direction of the tail. If no stool in 48 hours of this protocol, or if the gecko is clearly distressed or the abdomen hardens, escalate. **When to call a vet:** within 48 hours of no stool response to soaking. Intestinal impaction that doesn't resolve becomes fatal.

### Stuck shed on toes and eye caps

**What you see:** gray banded rings around one or more toes that do not come off after a shed; a milky blue-white cap over one or both eyes with no clear eye pupil visible beneath; in chronic cases, toes that appear constricted or misshapen. **Why:** insufficient humidity in the humid hide, dehydration, or a missed shed that has begun layering. **What to do:** 10 to 15 minutes in a shallow warm soak, then very gentle loosening with a damp cotton swab. For eye caps, see a vet rather than attempting removal. Check all ten toes after every shed. **When to call a vet:** eye caps that don't release after two soaks should be seen immediately; retained toes with visible constriction are a same-week appointment.

### Appetite loss and seasonal slow-down

**What you see:** a gecko who was eating every two days suddenly refuses all food for days or weeks, is still otherwise active and alert, is maintaining normal body weight, and shows no physical symptoms. Most likely to occur September through February. **Why:** seasonal reproductive and brumation-related behavior — in their native range, leopard geckos naturally reduce activity in cooler months. Males are more dramatically affected than females. **What to do:** continue offering food every three to four days; do not force-feed a gecko who is maintaining weight; check that the warm side temperatures are holding correctly; keep the calcium dish available. Monitor tail base weekly. **When to call a vet:** if appetite loss coincides with weight loss (thin tail base), physical symptoms, or lasts more than eight weeks with obvious weight change.

### Cryptosporidiosis ("crypto")

**What you see:** chronic progressive weight loss despite a normal or increased appetite, persistent loose or watery stool, a wasting appearance in the hind end while the gecko continues eating aggressively. Often called "stick tail" in its advanced stages because the tail becomes severely emaciated while the gecko appears hungry. **Why:** *Cryptosporidium varanii*, a single-celled intestinal parasite with no reliable cure. It spreads through fecal-oral transmission, is devastatingly contagious between reptiles, and can survive on surfaces for weeks. **What to do:** isolate immediately — separate enclosure, separate equipment, rigorous hygiene, and

no shared tools with other reptiles. Work with a reptile vet on a management protocol; some palliative treatments slow progression. **When to call a vet:** immediately when the combination of weight loss plus ravenous appetite plus thin tail appears together. Crypto-positive animals should never share housing or equipment with healthy geckos, and the decision about long-term management is one to make with veterinary guidance.

### Mouth rot (stomatitis)

**What you see:** swelling around the mouth; the gecko wiping its mouth repeatedly on enclosure walls; reddened, inflamed gum tissue visible when the mouth opens; in moderate cases, a yellowish or cheesy-looking discharge around the mouth margins; in severe cases, jaw tissue that looks necrotic. **Why:** bacterial infection in mouth tissue, often initiated by a small cut from a cricket bite, an abrasion from rubbing on rough decor, or chronic stress and immune suppression. **What to do:** isolate the gecko; gently clean accessible areas of the mouth with a dilute chlorhexidine solution on a cotton swab; address any environmental stressors. **When to call a vet:** within a few days of first symptoms — stomatitis spreads to bone and can become life-threatening if left untreated. Antibiotic treatment is typically required.

### Tail loss (autotomy)

**What you see:** the gecko's tail separates from her body, usually during a stressful handling event, a fall, being bitten by a feeder insect, or an attempt at cohabitation. The detached tail continues to wriggle actively for several minutes. The stump is typically round, sealed, and does not bleed heavily because the autotomy — the voluntary tail-dropping mechanism — is a precisely evolved defensive response. **Why:** voluntary defensive behavior. The tail will regenerate over the following weeks and months, but the regenerated tail is always a rounder, smoother fat deposit rather than the banded and spotted original, and it stores fat differently. **What to do:** keep the stump clean and dry, move the gecko to a paper towel substrate to prevent infection, offer slightly more food than usual to help replenish the fat reserves that were stored in the tail. **When to call a vet:** if the stump shows signs of infection (swelling, discharge, discoloration beyond normal healing pink), or if the gecko seems in significant distress beyond the first hour.

### Egg-binding (dystocia) in females

**What you see:** a female gecko who is visibly swollen in the lower body, is straining repeatedly, is restless or lethargic, has lost appetite, and may have been seen digging for an extended time without successfully depositing eggs. Can occur in females who have never been with a male (unfertilized eggs are common) and in females who were not provided an appropriate lay box. **Why:** the eggs cannot be passed — because no suitable laying site was offered, because an egg is malformed, or because of a calcium deficit affecting muscle function. **What to do:** if you keep adult females, always maintain a lay box — a container filled with damp coco fiber or topsoil, deep enough for the gecko to half-bury herself, with an entry hole cut in the side. Offer it as a permanent enclosure feature or introduce it when the female becomes visibly gravid. Warm soaks may help in mild cases. **When to call a vet:** any female who has been visibly straining for more than 12 to 24 hours without depositing eggs, or who appears systemically unwell. Dystocia can be fatal without veterinary assistance.

### Thermal burns from unregulated heat

**What you see:** blistered, discolored, or peeling scales on the ventral (belly) surface, legs, or sides; the gecko may be reluctant to rest on the affected side; in severe cases, exposed tissue is visible beneath lifted scales. Burns are often found on the belly from under-tank heaters without thermostat control, or on the sides from a heat lamp positioned too close to the glass wall. **Why:** contact with a surface hotter than the gecko can self-regulate off, or radiant heat too intense for the body wall. The gecko cannot always feel a burn developing because the pain response in reptiles is slower than in mammals. **What to do:** correct the heat source and thermostat configuration immediately; move the gecko to a clean, thermostatted enclosure on paper towel while healing; keep the burned area clean and dry. **When to call a vet:** for any burn that shows exposed tissue, seems to be worsening, or involves the belly at the level of the cloaca. Burns in reptiles become infected easily and often require antibiotic support.

### Parasites and mites

**What you see:** small moving specks on the gecko's skin, in the water dish, or in the enclosure corners — particularly around the eyes, ear openings, and skin folds; the gecko rubbing against surfaces or soaking more than usual; a general dull, unwell appearance. Mites appear as pinhead-sized dark or red moving dots. **Why:** reptile mites (*Ophionyssus natricis* and others) are common in animals that came through pet distribution chains or reptile expos, and can transfer between enclosures on your hands and clothing. **What to do:** quarantine immediately from any other reptiles in the home; treat the enclosure with a reptile-safe mite treatment; soak the gecko gently in warm water to drown mites on the body. **When to call a vet:** for a heavy infestation, a sick gecko, or a gecko who is not responding to over-the-counter treatment. Internal parasites (pin worms, flagellates, *Cryptosporidium*) require fecal testing — if you adopted a new gecko from any source, a baseline fecal exam is genuinely worth doing.

### Obesity from superworm or mealworm overuse

**What you see:** a fat, rounded body with obvious fat deposits in the axilla (armpit region) and above the hips; the tail is excessively thick and firm; the gecko may be sluggish and refuse to move much; she may refuse nutritious feeders in favor of waiting for the high-fat options she's been conditioned to expect. **Why:** superworms and mealworms are both high in fat relative to their protein content, and a gecko who has learned they're available will hold out. Obesity in leopard geckos strains the liver and metabolic system over time and shortens lifespan. **What to do:** transition back to dubia roaches and crickets as the primary feeder; cut fat-dense options for 30 to 60 days; offer smaller meals at the established schedule rather than reducing frequency (sudden diet restriction stresses the animal). **When to call a vet:** for a gecko who is refusing all food for more than four weeks on the new protocol, or who shows lethargy beyond what you'd expect in a slow-down.

### Quick reference

| What you see                                  | Likely cause                | What to do                                        | Vet urgency                                      |
|-----------------------------------------------|-----------------------------|---------------------------------------------------|--------------------------------------------------|
| Trembling limbs, soft jaw                     | MBD — calcium or D3 deficit | Correct supplements and UVB immediately           | Within days; sooner if severe                    |
| No stool for 3+ days, swollen belly           | Impaction                   | Warm soaks, gentle massage                        | 48 hours with no response                        |
| Gray rings on toes, milky eye caps            | Retained shed               | 15-minute warm soak, gentle loosening             | Eye caps: same week; constricted toes: same week |
| Off food for weeks, alert, maintaining weight | Seasonal slow-down          | Continue offering, monitor tail base              | Only if weight loss follows                      |
| Weight loss + ravenous appetite + thin tail   | Cryptosporidiosis           | Isolate immediately                               | Same week                                        |
| Mouth swelling, cheesy discharge              | Stomatitis                  | Clean with dilute chlorhexidine                   | Within a few days                                |
| Tail separation                               | Autotomy                    | Clean stump, paper towel substrate                | If stump becomes infected                        |
| Female straining, no eggs after 12 hours      | Dystocia                    | Warm soak; if no result, vet                      | Same day if straining continues                  |
| Blistered or lifting belly scales             | Thermal burn                | Fix heat source; clean dry wound                  | Open tissue: same day                            |
| Tiny moving dots on skin or in water dish     | Mites                       | Quarantine; treat enclosure and gecko             | Heavy infestation or sick gecko: soon            |
| Very fat body, refuses non-fat feeders        | Obesity                     | Transition to staple feeders; consistent schedule | Only if refusing all food for 4+ weeks           |

## SECTION 9

## Handling & Taming

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Leopard geckos are among the most genuinely handleable lizards in the hobby, but that ease is earned rather than assumed. A gecko who has been in her enclosure for three days, has found her hides, and has eaten a meal or two is ready to begin the process. A gecko who hasn't is not.

### The slow approach method

**Days 1–5:** leave her entirely alone except for quiet food and water checks. Let her establish her scent map and thermal routine without a large warm object reaching into her space.

**Days 5–10:** begin sitting next to the enclosure at dusk and speaking quietly. Don't tap the glass. The goal is for your presence and voice to become background information, not a stimulus.

**Days 8–14:** open the enclosure door and let your hand rest flat on the floor near the cool hide — not moving toward her. A gecko who approaches and sniffs your hand is more tame than one who allows herself to be caught. Many geckos will step onto a stationary hand before they are comfortable with a hand that moves toward them.

**Day 14 onward:** once she steps on voluntarily or tolerates a smooth scoop from below, begin brief sessions — two to three minutes at first, extended as she relaxes. Always support the full body; let her walk from hand to hand rather than gripping.

### Handling rules

**Never grab the tail.** This point cannot be overstated. The tail is both a fat reserve and an autotomy point. A gecko grabbed by the tail is likely to drop it as a defensive response. The regenerated tail is functional but it is never the same as the original. Approach from the side, scoop from underneath, and support the full length of the body.

**Read the stress signals.** A gecko who flattens her body, waves her tail slowly from side to side, vocalizes (a small squeak), orients her body away from your hand, or makes repeated attempts to leave is telling you the session has gone long enough. She's not being difficult — she's communicating clearly, and responding to that communication is what makes her more confident over time, not less.

**Keep handling sessions under ten minutes for the first few months.** A gecko who is regularly handled for short calm sessions tames faster than one who endures long stressful ones. She can always choose to stay on your hand longer by not leaving. If she's trying to get back to the enclosure, let her.

**Support and floor level.** Handle low over a table or your lap, never at standing height. Leopard geckos can and do fall, and a drop of two feet onto a hard surface is a real injury risk. If a child is handling, they should sit on the floor.

**Children and supervision.** Leopard geckos are one of the most suitable reptiles for families, but supervision is mandatory for children under ten. Young children should handle while seated, on carpet or a blanket, with an adult's hands underneath as a safety net. Teach children to let the gecko walk rather than holding her still, and to put her back the moment she starts signaling stress.

## SECTION 10

# Routine Care Calendar

| How often       | What to do                                                                                                                      |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------|
| Daily           | Confirm the water dish is full and clean; replace as needed                                                                     |
| Daily           | Check warm side surface temperature and cool end temperature with probe thermometers                                            |
| Daily           | Check that the humid hide moss is damp; mist if drying out                                                                      |
| Daily           | Offer food on the appropriate schedule for the gecko's life stage; remove uneaten live feeders within 30 minutes                |
| Daily           | Spot-clean — remove any visible feces, urate deposits, or shed skin fragments                                                   |
| Daily           | Observe the gecko at dusk for 5 minutes: movement, alertness, body condition, eye clarity                                       |
| Daily           | Confirm the UVB lamp came on and off on the correct photoperiod                                                                 |
| Weekly          | Replace water dish water and scrub the dish in hot water with mild unscented soap; dry fully                                    |
| Weekly          | Inspect the humid hide; rinse and re-moisten moss if it smells stale; full replacement of moss every two to four weeks          |
| Weekly          | Check body condition at the tail base — note whether the tail is getting thinner, maintaining, or thickening                    |
| Weekly          | Inspect all ten toe tips for retained shed, especially after any shedding event                                                 |
| Weekly          | Audit the calcium dish; top up if empty                                                                                         |
| Weekly          | Check the UVB bulb is lighting fully and note the date in a log (replace every 12 months)                                       |
| Monthly         | Deep clean the enclosure — remove decor, wipe surfaces with a reptile-safe disinfectant, allow to dry fully before replacing    |
| Monthly         | Wash hides, water dish, and decor in hot water; dry before returning                                                            |
| Monthly         | Inspect substrate for moisture, bacterial smell, or visible mold if using a bioactive mix                                       |
| Monthly         | Review the supplement rotation schedule and reorder supplies before running low                                                 |
| Monthly         | Photograph the gecko from above for a body condition baseline you can compare over time                                         |
| Every 6 months  | Audit the thermal gradient with fresh probe thermometer batteries; recalibrate if readings seem off                             |
| Every 12 months | Replace the UVB bulb regardless of visible output                                                                               |
| Annually        | Exotics vet wellness check including a baseline fecal exam; twice annually for females who lay eggs or geckos over 10 years old |

## SECTION 11

## When to See a Vet

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Leopard geckos are stoic animals and mask illness well — by the time a gecko shows visible symptoms, the problem has usually been developing for some time. The rule that applies here is the same as with any long-lived reptile: **when you're not sure whether to call, call.**

**Go today — same day or emergency:**

- Prolapse of any tissue from the cloaca (rear vent) — this is a true emergency
- Open mouth breathing or labored respiration; any audible clicking or wheezing
- A gecko who cannot right herself or is found lying on her side without response to gentle touch
- Active straining in a female with no eggs deposited after 12 hours or more
- Obvious fracture, wound with exposed tissue, or a bleed that doesn't stop within a few minutes
- Thermal burn with exposed tissue or tissue that is obviously dying
- Sudden complete loss of coordination, circling, or seizure-like activity
- A gecko who soaked for 48 hours still hasn't produced stool and has a visibly hard or swollen abdomen
- Eye that is sunken, cloudy, or appears to have retained a cap that is cutting into the eye tissue

**Book within a few days:**

- No stool for five or more days with no response to soaks and belly massage
- Retained shed on toes that doesn't release after two warm-soak sessions
- Mouth tissue that is red, swollen, or showing any discharge
- Any progressive weight loss — a tail that has gone from full to thin over two to three weeks
- Chronic loose stool over two or more shed cycles, combined with weight loss
- Mite infestation that is not improving with over-the-counter treatment
- A new lump anywhere on the body
- A female who has become visibly gravid but shows no interest in the lay box over several days

Find your exotic animal vet now, not when you need one. Confirm they have reptile experience, and ask specifically whether they see leopard geckos and what their after-hours or urgent care protocol is. Bring a written temperature log, your supplement schedule, and a fresh fecal sample in a sealed container to any appointment.

## SECTION 12

# FAQ

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## What do leopard geckos eat?

Leopard geckos are strict insectivores — they eat only insects and have no use for fruit, vegetables, or any plant food. The best staple feeders are dubia roaches, crickets, and black soldier fly larvae, all of which should be gut-loaded on leafy greens and quality dry gut-load for at least 24 hours before feeding. Hornworms and silkworms are excellent occasional additions. Superworms and mealworms can be used sparingly but are high in fat and make poor primary feeders; mealworms in particular have a high chitin content that reduces their digestibility. Every meal should include lightly dusted calcium powder, and a calcium-with-D3 plus a multivitamin rotation should happen once weekly each.

## How big a tank does a leopard gecko need?

The minimum for one adult leopard gecko is a **36" × 18" floor footprint** — the equivalent of a 40-gallon breeder tank — and a front-opening enclosure is preferred so you aren't reaching over the gecko from above. Floor space matters far more than height because leopard geckos are ground-dwelling and need enough room to move between a warm end and a cool end with hides at both extremes. A larger enclosure is never harmful and is genuinely better for the gecko's long-term wellbeing; 48" × 18" or bigger gives a more stable gradient and more behavioral space over a fifteen-to-twenty-year lifespan.

## Do leopard geckos need UVB light?

Yes, UVB is now recommended for leopard geckos even though many are kept without it. Current evidence shows that low-level UVB — a Ferguson zone 1 lamp providing a UVI of 0.5 to 1.0, equivalent to dappled shade in their native habitat — measurably improves calcium metabolism and bone density and supports more natural behavior. A 5.0 or 6% T5 HO fluorescent tube at the appropriate distance is the correct product. The UVB lamp runs on a 12-hour photoperiod and should be replaced every 12 months regardless of whether it still visibly lights, because UV output degrades before visible output does.

## What temperature do leopard geckos need?

The warm side basking surface should sit at **88–92°F**, with the warm-side air temperature at gecko height between **80–85°F**. The cool end should hold at **70–75°F**. At night, when the overhead heat source is off, the enclosure can drop to **68–72°F** — this mirrors the natural nighttime temperature drop in their native range. Every heat source must be connected to a thermostat; unregulated heat sources cause burns. The thermal gradient is what allows the gecko to self-regulate her body temperature throughout the day, and without both ends of it working correctly, every other aspect of her health is affected.

## How long do leopard geckos live?

With good care, **15 to 20 years** is the realistic expectation for a leopard gecko, and individuals living past 20 are documented in well-managed collections. This makes the lifespan comparable to a cat or small dog, and it's worth taking seriously before acquiring one. The factors that most reliably extend life toward the top of the range are a correct thermal gradient from the start, a consistent calcium and D3 supplement schedule, a diet built around nutritious gut-loaded feeders rather than high-fat treats, and access to a veterinarian familiar with reptiles.

## Why won't my leopard gecko eat?

The most common reasons are a seasonal slow-down (completely normal September through February, especially in adult males), a recent move or change in enclosure that is still stressful, a temperature gradient that has drifted — check both ends with fresh probe readings — or the gecko being in pre-shed. Less commonly, appetite loss signals illness, particularly if it's accompanied by weight loss at the tail base, changes in stool, or physical symptoms. Offer food every three to four days during a fast and monitor the tail base weekly; a gecko who is maintaining weight and is otherwise alert during her active period at dusk is almost always

just in a natural slow-down. A gecko who is losing weight or showing symptoms needs a vet appointment.

### Can two leopard geckos live together?

Not safely, and not for beginners. Leopard geckos are **strictly solitary** in the wild and do not benefit from companionship. Two females may tolerate each other briefly but will almost always develop a dominant-subordinate relationship where the subordinate gecko is outcompeted for food, hides, and basking spots — often without any dramatic aggression that alerts the keeper. Two males housed together will fight, and the injuries can be severe. A gecko who looks fine in cohabitation is frequently the dominant animal; the subordinate's chronic stress shows up as weight loss, skin problems, and immune depression over weeks rather than immediate wounds. One gecko per enclosure is the standard for this species.

### Is sand safe for leopard geckos?

Loose sand — including the calcium or vitamin sand sold specifically for reptiles — is not a safe substrate for leopard geckos, particularly for juveniles and any gecko who is calcium-deficient (which includes many in suboptimal husbandry). Sand is ingested during feeding, during licking behaviors, and incidentally from the enclosure floor, and it accumulates in the digestive tract faster than most keepers expect. The marketing around calcium sand as a supplement delivery vehicle does not hold up — it is not a reliable or safe calcium source. Safe substrate options include ceramic or slate tile, paper towel, and bioactive soil mixes for healthy adults. Coarse sand may appear as a small component of a well-established bioactive mix, but it should never be a primary or solo substrate.

### How often do you feed a leopard gecko?

Hatchlings and juveniles under six months eat daily; sub-adults from six to twelve months eat every two days; adults twelve months and older eat every two to three days. Gravid females and underweight animals eat more frequently. Adjust based on body condition — the tail base is the key indicator, and a tail that is actively thinning means the animal is not getting enough food, while an excessively fat, rounded tail with large axillary fat deposits means it's time to reduce the fat-dense feeders and return to a nutritious staple rotation. The quantity per feeding is roughly 6 to 10 appropriately sized insects for a healthy adult, offered in a way that lets the gecko hunt rather than eating from a pile.

### Why is my leopard gecko's tail getting thin?

A thinning tail is the body condition indicator for leopard geckos and should always be taken seriously. A full, rounded tail means the gecko has adequate fat reserves; a tail that is visibly narrowing from the base indicates the animal is drawing on those reserves, either because it is not eating enough, because it is ill and not absorbing nutrition properly, or because it is a gravid female with the metabolic demands of egg production. Rule out temperature gradient drift first — a warm side that has dropped even a few degrees will reduce feeding drive and digestion. If the tail is thinning in a gecko who appears to be eating normally, a vet appointment with a fecal exam is worth doing to rule out internal parasites, crypto, or other causes of nutrient malabsorption.

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## SECTION 13

## Every Purchase Gives Back

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Before we earn a dime, **10% of every purchase at Walnut Creek Supply goes to no-kill animal shelters across the country.** Not at checkout, not as an option — it comes off the top of every order, every day, because we believe responsible pet ownership and community care are inseparable.

That means something a little specific for reptile keepers. Leopard geckos are among the most common animals surrendered to reptile rescues, usually because somebody bought one with a heat rock and a ten-gallon tank and no guidance, and then couldn't figure out why the gecko was always sick. If you're reading this guide, you're not that person. And if you're in a position to adopt rather than shop — the rescues in your area have beautiful, healthy geckos waiting for a keeper who knows what they're doing.

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