

Recommended Annual Husbandry Schedule

Diplolaemus leopardinus - Leopard iguana

Identity and range

Valid Leiosauridae species of the central Andes and northwestern Patagonia. Well-studied populations occur in Mendoza, Argentina; Angostura Valley animals were studied at about 2405 m, and records elsewhere exceed 1800-2600 m.

Climate and habitat

Cold, arid high-Andean valleys, sub-Andean grass steppe, rocky deposits and scree. At Angostura the mean annual temperature is about 6.1-6.3 C, summer maxima reach roughly 29 C, winter minima about -15.5 C, and lizards are inactive from autumn until early spring.

Thermal biology and diet

Direct measurements show low operating temperatures for a lizard: active body temperature about 26.7 C and preferred temperature about 30.9 C. The species is carnivorous/insectivorous and field accounts also report saurophagy and cannibalism. Oviparity is confirmed.

Month	Day ambient	Night	Basking surface	T5 UVI*	Photoperiod	Moisture	Adult food offers*	Seasonal management
Jan	6-9 C	4-7 C	Off	Off	8 h	Water check; dry refuges	None	Winter rest
Feb	6-9 C	4-7 C	Off	Off	8 h	Water check; dry refuges	None	Winter rest
Mar	8-12 C	4-8 C	30-33 C limited	1-2	9 h	Minimal local moisture	1 late	Staged warm-up
Apr	12-16 C	6-9 C	32-35 C	2-3	10.5 h	Light local spray 1x/wk	2-3	Reconditioning / emergence
May	15-19 C	8-11 C	33-36 C	3-4	12 h	Mostly dry; water always	3-4	Full activity / courtship watch
Jun	17-21 C	9-12 C	34-37 C	3-4	13.5 h	Mostly dry	4-5	Peak activity / mating watch
Jul	18-22 C	10-13 C	35-38 C	3-4	14 h	Dry; water always	4-5	Peak activity / egg development
Aug	17-21 C	9-12 C	34-37 C	3-4	13.5 h	Local moist nest zone	4-5	Nesting / egg-laying watch
Sep	15-19 C	8-11 C	33-36 C	2-3	12 h	Local nest moisture only	3-4	Post-lay / late activity
Oct	12-16 C	6-9 C	31-34 C limited	2-3	10.5 h	Light local spray weekly	2-3	Seasonal taper
Nov	8-12 C	4-8 C	30-32 C limited	1-2	9 h	Minimal; keep refuges dry	1 then stop	Cooling
Dec	6-9 C	4-7 C	Off	Off	8 h	Water check; dry refuges	None	Winter rest

Climate translation: this northern-hemisphere schedule shifts the Central Andean warm season by about six months. Wild winter minima below freezing are ecological context, not captive targets; controlled winter refuges should remain above freezing.

* **T5 UVI:** target at the lizard's normal back height directly beneath the brightest accessible part of the tube. Covered refuges near UVI 0. Measurement details: page 4.

UV settings, including seasonal taper, are provisional. Rock-surface targets are not body-temperature targets. Field-active mean: 26.7 C; preferred mean: 30.9 C.

Winter safety: cool only healthy adults after feeding has stopped and the gut is clear. Record mass, perform planned checks, and reverse cooling for weight loss, dehydration, respiratory signs or persistent activity without normal digestion.

MEASURE DIRECTLY UNDER YOUR T5 TUBE

The strip is positioned towards the rear and exposure is voluntary. Measure at the animal's back height on its usual exposure surface, with reflector and any mesh in place. Adjust tube height within the manufacturer's minimum-distance guidance. Full activity, May-August: **UVI 3-4**, starting near 3; October: **UVI 2-3**. These are inferred working ranges, not a measured optimum.

Practical Husbandry and Daily Management

A cold-running, territorial Andean predator: cool air, heated rock surfaces, deep secure burrows, excellent ventilation and individual housing are central to the model.

Enclosure and refuge design

For one adult, about 120 x 60 x 60 cm is a practical facility starting point rather than a published minimum; larger is preferred. Individual housing is the safest default because the species is territorial and field accounts report saurophagy and cannibalism.

Build stable rockwork directly from the enclosure base. Provide tight caves and deep burrow-like refuges beneath basking rocks, plus cooler retreats with complete shade. Firm sandy/loamy substrate with planted or artificial shrub cover can reproduce the deep-burrow microhabitat described beneath *Adesmia* and rocks.

Heat, light and UVB

Active body temperature averages 26.7 C and preferred temperature about 30.9 C. Rocks are a major heat source; sun basking also occurs. Keep air cool with local 34-38 C rock surfaces. For full activity, UVI 3-4 beneath the T5 is an inferred working range, starting near 3, with covered refuges near UVI 0. Low body temperature does not establish low UV needs. See page 4.

Water, humidity and ventilation

Keep shallow fresh water available year-round. Angostura is cold and arid with about 359 mm annual precipitation, including midsummer rain and winter snow. Keep the enclosure generally dry and well ventilated; use only localized nest moisture and occasional light spraying rather than sustained humidity.

Diet and feeding

Base routine feeding on varied, well-gut-loaded invertebrates such as crickets, roaches, locusts and appropriate larvae, with calcium/mineral support matched to UVB and reproductive state. Wild records include lizard predation and cannibalism, but routine live-lizard feeding is unnecessary in captivity. Avoid obesity before winter cooling.

Social management and keeper safety

Treat adults as territorial and potentially dangerous to smaller conspecifics. Use visual contact through a divider before any breeding introduction. Provide duplicate refuges and basking access, and separate immediately for biting, sustained pursuit, refuge blocking, feeding suppression or attempts to seize the partner as prey.

Daily keeper checks

Check	Record
Activity	Emergence, basking duration, refuge choice and locomotion
Feeding	Prey types, intake, water and faeces
Condition	Mass trend, jaw, eyes, skin, toes, limbs and wounds
Environment	Basking rock, warm/cool air, UVI and refuge temperature

Veterinary triggers

Seek reptile-veterinary assessment for persistent weight loss, weakness, abnormal breathing, bite wounds, jaw or limb swelling, failure to bask after warm-up, continued activity during deep cooling, or a female showing repeated digging/straining without laying. Quarantine and faecal screening are prudent for all new animals.

Breeding, Oviparity and Evidence Review

Oviparity is confirmed, but species-specific clutch size, nesting dates and incubation conditions remain poorly documented. Treat the breeding windows below as working hypotheses and record every event.

Seasonal breeding management

Warm conditioned adults gradually through March and April. The May-June courtship/mating and July-August egg-development/nesting windows on this shifted northern-hemisphere calendar are conservative working periods inferred from emergence and Central Andean seasonality, not published *D. leopardinus* breeding dates.

Use visual contact through a divider before direct introduction. Provide at least two secure shelters and feeding points. Separate immediately for sustained pursuit, biting, refuge blocking or any attempt to seize the partner as prey.

Nesting and eggs

Provide a secluded diggable nesting zone before females become visibly gravid: firm soil/sand that holds a tunnel without becoming waterlogged. Species-specific clutch size and incubation temperature were not located in the literature. If eggs are produced, record lay date, egg mass and dimensions, maintain orientation, and treat incubation as an evidence-building protocol rather than assuming values from unrelated warm-climate iguanians.

Hatchlings

House hatchlings separately because territoriality and cannibalism are documented in natural-history accounts. Provide narrow burrow/rock retreats, modest local basking, measured UVB, constant water and appropriately sized gut-loaded invertebrates. Record hatch date, mass, length, first feed and first shed.

Evidence confidence

Topic	Confidence and application
Identity / range	High: Reptile Database, Argentine park records and modern phylogeographic work
Habitat / climate	High: Angostura field studies at 2405 m and protected-area records
Thermal biology	High: direct field and laboratory measurements of Tb, Te and preferred temperature
Diet / territoriality	Moderate-high: field-guide synthesis plus behavioral studies
UV / enclosure	Low-moderate: conservative facility starting points; no direct UV requirement study
Breeding timing / incubation	Low: oviparity confirmed, timing and incubation remain evidence-poor

How climate was translated

The Angostura study site is at 2405 m in Mendoza. Published field studies describe a cold arid climate with mean annual temperature about 6.1-6.3 C, summer maximum around 29 C, winter minimum about -15.5 C and about 359 mm annual precipitation. Lizards remain inactive from autumn until early spring. Captive winter values are intentionally milder and above freezing while preserving a pronounced seasonal rest.

Record set for every breeding attempt

Individual IDs and provenance; dates of cooling and warm-up; mass trend; prey intake; basking and refuge use; introduction dates; courtship; confirmed mating; digging; lay date; clutch size; egg mass and dimensions; incubation method; hatch date; neonatal measurements; and female recovery.

Key references

- Vicenzi et al. (2020), Journal of Experimental Biology 223:jeb221382 - Angostura study area, activity season and thermal ecology.
- Vicenzi et al. (2019), CONICET ecological-physiology workshop - direct body, operative and preferred temperature data.
- SIB, Administracion de Parques Nacionales Argentina - habitat, burrows, carnivory, saurophagy and cannibalism.
- Reptile Database - current taxonomy, distribution and oviparity.

T5 UVB: measurement and adjustment

Reading at normal back height directly beneath the tube | Reviewed 3 October 2026

MEASURING POINT

Under the T5

Brightest accessible area, at dorsal height

FULL ACTIVE SEASON

UVI 3-4

May-August: inferred range; start near 3

COVERED RETREATS

Near UVI 0

Animals can freely leave the UV zone

How to measure and adjust

- 1. Use the right meter.** Use a meter displaying UV Index (UVI), such as a Solarmeter 6.5 or 6.5R. Broadband UVB readings in microwatts/cm2 cannot be substituted for these UVI targets.
- 2. Measure the installed arrangement.** Leave the reflector, guards and any mesh in their normal positions. Allow the tube to warm up for about 30 minutes before taking readings.
- 3. Use the animal's back height.** With the animal elsewhere, hold the sensor at normal dorsal height above its usual rock or exposure surface, aimed towards the tube. Find the brightest accessible part of the strip.
- 4. Adjust the tube height.** Start near the lower end of the month's range and adjust gradually. Respect the manufacturer's minimum distance and recheck after each change; a lamp-output percentage is not a UVI measurement.
- 5. Check the whole gradient.** Check every higher surface the animal can access and keep readings within the selected target range there. Keep open shade and fully covered refuges near UVI 0. Exposure must remain voluntary.
- 6. Record and recheck.** Log UVI, the exact measuring point, tube-to-back distance, tube age and lamp-on hours. Recheck at seasonal changes and after moving furnishings, cleaning or replacing the tube, reflector or mesh.

Seasonal UVI beneath the T5

Northern-hemisphere stage	UVI at back height
January, February, December	UVB off
March and November	1-2
April, September, October	2-3
May-August: full activity	3-4 (start near 3)

What the target does and does not establish

This is the optional exposure zone directly under the tube. It is not an enclosure-wide average, a reading on the bare floor, or a requirement for the animal to stay under the lamp all day. Exposure duration remains part of the dose; record lamp-on time and animal behaviour.

The UV-Tool gives generic UVI 3-5 guidance for an optional sun-basking patch. UVI 3-4 here is a cautious extrapolation from that guidance and the species' habitat use, not a validated species optimum or safe maximum. The seasonal taper is also inferred, not measured wild monthly UVI. Altitude alone does not establish the required captive UVI.

Evidence: Vicenzi et al. (2020), Journal of Experimental Biology, DOI 10.1242/jeb.221382. Baines et al. (2016), the UV-Tool, Journal of Zoo and Aquarium Research 4:42-63; jzar.org/jzar/article/view/150. Meter guidance: Solar Light, solarlight.com/product/model65r.