

Recommended Annual Husbandry Schedule

Liolaemus kolengh - Kolengh lizard

Identity and locality A valid Patagonian Liolaemus described from Monte/Cerro Ceballos near Rio Ceballos, Santa Cruz, Argentina, at about 1,485 m. It also occurs in Chile at Lago Jeinimeni National Reserve.	Habitat and thermal biology Cold, windy highland steppe with sparse vegetation, bare ground and flat stones. A 2026 study at 1,329 m found a thermoconforming strategy; older physiology work reported preferred temperature about 31.8 C and broad cold tolerance.	Reproduction and diet Current references treat L. kolengh as viviparous/ovoviviparous. Field material from Jeinimeni contained both plant matter and insects, supporting an omnivorous working diet rather than strict insectivory.
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Month	Day ambient	Night	Basking surface	UVI*	Photoperiod	Moisture	Adult food offers*	Seasonal management
Jan	7-10 C	5-7 C	Off	Off	8 h	Water check; mostly dry	None	Core cooling - winter rest
Feb	7-10 C	5-7 C	Off	Off	8 h	Water check; mostly dry	None	Core cooling - winter rest
Mar	10-14 C	6-8 C	29-32 C limited	1-2	9 h	Light local moisture	1 late	Staged warm-up
Apr	14-18 C	8-10 C	31-34 C	2-3	10.5 h	Mostly dry; water always	2-3	Emergence / reconditioning
May	17-21 C	9-12 C	32-35 C	3-4	12 h	Dry; strong ventilation	3-4 mixed	Full activity / courtship watch
Jun	19-23 C	10-13 C	33-36 C	3-4	13.5 h	Dry; water always	4 mixed	Main mating / breeding window
Jul	20-24 C	11-14 C	33-36 C	3-4	14 h	Dry; water always	4 mixed	Early-mid gestation
Aug	19-23 C	10-13 C	33-36 C	3-4	13.5 h	Dry; water always	4 mixed	Gestation
Sep	17-21 C	9-12 C	32-35 C	2-3	12 h	Mostly dry	3-4 mixed	Late gestation / births possible
Oct	14-18 C	8-10 C	31-34 C limited	2-3	10.5 h	Light local moisture	2-3 mixed	Birth / recovery window
Nov	10-14 C	6-8 C	29-32 C limited	1-2	9 h	Light local moisture	1 then stop	Autumn taper / juvenile watch
Dec	7-10 C	5-7 C	Off	Off	8 h	Water check; mostly dry	None	Winter rest

Climate translation: this species occupies very cold, windy Andean-Patagonian steppe around 1,000-1,485 m. Captive winter values intentionally avoid freezing, while still providing a pronounced seasonal rest. Native Southern Hemisphere seasons are shifted about six months for a Netherlands keeper calendar.

* No species-specific UV exposure target was found; UVI values are conservative measured starting points. Food frequency assumes healthy adults and should be adjusted to body condition and reproductive status.

Thermal note: published work reports preferred temperature near 31.8 C, locomotor optimum in the mid-30s, and critical minimum around 5.5 C. These are physiological measurements, not direct cage-setting prescriptions.

Practical Husbandry and Daily Management

A cold-adapted highland *Liolaemus*: keep the air cool, provide a local warm rock, strong ventilation, sparse structure and a mixed omnivorous diet.

Enclosure and refuge design

For one adult, approximately 120 x 60 x 50 cm or larger is a practical starting point; 120 x 70 x 50 cm is suitable. Use open rocky ground, flat slabs, shallow crevices and a sparse planted or cushion-style structure rather than dense humid planting. Build heavy rock directly from the enclosure floor so digging cannot destabilise it.

Heat, light and UVB

The species is cold-climate adapted but still needs access to solar heat. Provide an escapable rock basking surface around 32-36 C through the main active season while keeping the bulk air much cooler. The published preferred temperature near 31.8 C argues against excessively hot ambient conditions. Preserve complete shade and cool retreats.

Humidity and water

Field habitat is exposed, windy and sparsely vegetated. Keep the enclosure well ventilated and mostly dry, with constant clean drinking water. During cool periods use only localised moisture and avoid cold saturated substrate.

Seasonal cooling

Use a clear winter rest for healthy adults after feeding has stopped and the gut has cleared. This schedule uses roughly 5-7 C nights and 7-10 C days as a controlled captive target. Do not expose captive animals to frost, and warm any animal that loses excessive mass or remains clinically compromised.

Diet

Wild specimens from Lago Jeinimeni contained both plant remains and insects. Use an omnivorous rotation: varied gut-loaded insects as a major component, supplemented with small amounts of safe leafy greens, edible flowers and tender plant material. Avoid a mealworm-dominated diet despite historical captive acceptance of *Tenebrio*.

Feeding rhythm

Feed strongly but leanly during the short active season. Reduce feeding through autumn taper and stop routine food before winter rest. Resume gradually after animals show consistent basking and normal digestion in spring.

Social management

Published work does not justify assuming stable communal housing. Provide multiple refuges and duplicate basking access. Individual housing is safest when aggression history is unknown; separate immediately for chasing, biting, refuge exclusion, suppressed basking or weight loss.

Daily keeper check

Confirm posture and alertness, basking choice, refuge access, water availability, normal faeces, body condition and absence of bite injuries. During cooling, log body mass regularly and keep disturbance low.

Breeding, Evidence and Keeper Notes

Published evidence is strongest for locality, habitat and thermal physiology; species-specific reproductive timing is less well resolved and should be recorded carefully in captivity.

Reproductive mode

Current databases and comparative datasets treat *Liolaemus kolench* as viviparous/ovoviviparous. Manage females as live-bearing unless direct evidence from your own stock demonstrates otherwise. A comparative clutch-size dataset reports an average near three offspring, but this should be treated as secondary evidence rather than a fixed litter size.

Working breeding calendar

Use spring emergence and early active-season courtship as the main pairing period, with gestation through the warm season and births expected toward late summer/early autumn. The table shifts this working model by about six months for the Northern Hemisphere. Record actual dates and adjust the colony schedule to your own stock.

Gestating females

Give gravid females unrestricted access to the full thermal gradient: local warm rock, intermediate shelves and deep cool refuges. Avoid raising whole-enclosure temperature to accelerate gestation. Maintain strong nutrition, hydration and calcium balance without overfeeding.

Neonates

Prepare narrow safe rock refuges and small prey before births are expected. House neonates separately if adults show aggression or feeding competition. Offer small gut-loaded invertebrates, measured low-moderate UVB and constant water, with cool ambient air and a modest local basking surface.

Evidence confidence

Topic	Confidence and application
Identity / locality	High: type locality and Chilean records are well documented
Cold/windy sparse habitat	High: directly described from Jeinimeni and recent thermal work
Thermal physiology	High: preferred temperature, optimum and cold tolerance published
Diet	Moderate-high: plant and insect remains documented in faeces
Reproductive mode	Moderate-high: multiple modern databases classify as viviparous
Exact birth timing	Moderate-low: use a working seasonal model and record your colony

Thermal context

Older experimental work reported preferred temperature about 31.8 C, locomotor optimum about 33.7 C (with a later comparative study reporting a slightly higher optimum), critical minimum about 5.5 C and critical maximum about 44 C. A 2026 field study at 1,329 m found the species largely thermoconforming because available habitat temperatures already matched its requirements.

Record set for every breeding cycle

Record adult IDs and provenance; emergence date; courtship and mating observations; female mass and abdominal contour; first obvious gravidity; birth date; litter size; neonatal mass and length; first shed; first voluntary feed; and any evidence that confirms or challenges the assumed live-bearing model.

Key references

- Abdala & Lobo (2006): original description and type locality near Rio Ceballos, Santa Cruz, Argentina.
- Nunez & Torres-Mura (2014): Lago Jeinimeni record, extreme cold/windy habitat and plant + insect diet evidence.
- Bonino et al. (2011): thermal preference, locomotor optimum and critical thermal limits for *L. kolench*.
- Victorel et al. (2026): high-elevation thermal ecology and thermoconforming strategy near Boleadoras Mount.
- Reptile Database and comparative parity datasets: current viviparous/ovoviviparous treatment.

UVI beneath the optional T5 tube

Liolaemus kolengh

Your measuring point

Measure UVI at normal back height directly beneath the brightest accessible part of the optional T5 strip. Place the strip toward the middle/back with free access to and away from it; preserve a gradient into fully covered refuges near UVI 0. These numbers describe the exposure area, not the whole enclosure or a daily average.

Measure and adjust

- 1. Use a UV Index meter.** A Solarmeter 6.5/6.5R or equivalent UVI meter is suitable. Broadband UVB readings in microwatts/cm2 cannot be substituted for UVI.
- 2. Measure the installed arrangement.** Warm the tube for about 30 minutes. Keep the reflector, guards and mesh in their normal positions. With the animal elsewhere, hold the sensor at its normal back height, aimed toward the tube.
- 3. Adjust the fixture.** Begin near the lower part of a newly selected working range and adjust gradually. Respect the lamp manufacturer's minimum distance. Recheck after each change and check every higher accessible branch, rock or platform.
- 4. Keep a full gradient.** Provide usable exposure across the animal's body, lower-UVI areas and fully covered refuges near UVI 0. For daytime baskers, overlap the UV area with visible light and appropriate basking warmth while retaining cooler shade.
- 5. Record and recheck.** Log UVI, measuring point, tube-to-back distance, tube age and lamp-on time. Recheck through the year and after changes to the tube, reflector, mesh or furnishings. Exposure duration and behaviour also determine dose.

A T5 range is a working exposure target, not a whole-cage setting, measured wild monthly average, guaranteed optimum or proven safety ceiling. The animal must be able to enter and leave freely.

Monthly target at normal back height

Month	UVI under T5 when on
January	Off
February	Off
March	1-2
April	2-3
May	3-4
June	3-4
July	3-4
August	3-4
September	2-3
October	2-3
November	1-2
December	Off

Refine numerical target

Offer UVI 3-4 in the optional T5 area during May-August, starting near 3, with lower spring/autumn targets. Rock/sun-basking ecology and general sunbeam guidance support this cautious working patch. It is not a measured species-specific optimum, and the recommendation is based on microhabitat and activity, not altitude alone. Keep immediate full shade and crevice retreats.

Evidence level: Inferred from sun-basking ecology. The seasonal schedule is a captive operating plan; it is not measured wild monthly UV. Off means the existing planned UVB-off/rest phase is preserved. Any staged Off/1 entry still means gradual reintroduction.

UV references: Baines et al. (2016), UV-Tool; Muryn, Baines and Dishman (2026), Reptile Lighting Guide V10; Chile Ministry of Environment, Liolaemus kolengh assessment. Full rationale and monthly comparison: UVI_Audit_Report.html.