

Recommended Annual Husbandry Schedule

Lacerta schreiberi - Iberian emerald lizard / Schreiber's green lizard

Identity and range

Iberian endemic occurring through much of Portugal and northern/central Spain, from sea level to about 2,100 m. It is especially associated with humid Atlantic-climate landscapes, stream margins, dense shrubs, open woodland and vegetated stone structure.

Climate and annual cycle

Cooler and more moisture-dependent than the Mediterranean green lizards. Wild activity is generally March-October, with winter dormancy. Surface activity peaks in spring and early summer; animals use humid vegetation and shaded refuges during hot weather.

Diet and reproduction

Primarily insectivorous: beetles, ants, flies and other invertebrates are important natural prey. Spring breeding is followed by one main clutch; montane females average about 14 eggs and incubation is comparatively long and cool.

MONTH	DAY AMBIENT	NIGHT	BASKING	UVI*	PHOTOPERIOD	RH DAY / NIGHT*	SPRAY / RAIN	FOOD*	SEASONAL MANAGEMENT
January	6-10 C	4-7 C	Off	Off	9 h	70-85 / 80-90%	Moist refuge; no saturation	None	Winter rest
February	7-11 C	4-8 C	Off / late limited	Off / 1 late	9 h 45 m	70-85 / 80-90%	Moist refuge; ventilate	None	Winter rest; staged wake late
March	14-18 C	7-10 C	30-34 C limited	1-2	11 h	65-80 / 75-90%	Light mist 3-4x/wk	1-2	Warm-up / conditioning
April	18-22 C	10-13 C	33-37 C	2-3	12 h 45 m	60-75 / 70-85%	Mist 3x/wk; humid retreat	3-4	Courtship / mating
May	20-24 C	12-15 C	35-39 C	2-3	14 h	60-75 / 70-85%	Mist 3x/wk; moist nest	4-5	Mating / vitellogenesis
June	22-26 C	14-17 C	35-40 C	2-3	15 h	55-70 / 65-80%	Mist 2-3x/wk; moist nest	4-5	Main laying period
July	23-27 C	15-18 C	35-39 C	2-3	14 h 45 m	55-70 / 65-80%	Cool moist refuge; 2-3x/wk	4	Incubation / recovery
August	22-26 C	14-17 C	34-38 C	2-3	13 h 45 m	55-70 / 70-85%	Mist 3x/wk; water always	3-4	Hatching / recovery
September	19-23 C	11-14 C	32-36 C	2	12 h 15 m	60-75 / 75-90%	Mist 3-4x/wk	3	Recovery / winter prep
October	15-19 C	8-11 C	30-34 C limited	1-2	10 h 45 m	65-80 / 80-90%	Light rain / mist 3x/wk	2 then taper	Autumn taper
November	9-13 C	5-8 C	Off / brief early	Off / 1	9 h 30 m	70-85 / 80-90%	Moist refuge; no stagnation	Stop	Cooling / clearance
December	6-10 C	4-7 C	Off	Off	9 h	70-85 / 80-90%	Moist refuge; no saturation	None	Winter rest

Calendar: Northern Hemisphere. *UVI, RH and feeding frequency are operational captive starting points rather than species-wide field measurements. This species needs a permanently available humid refuge even when exposed surfaces are allowed to dry. Winter cooling is for healthy, conditioned adults only; never allow freezing or stagnant, waterlogged hibernacula.

Practical Husbandry and Daily Management

A cool-temperate Atlantic green lizard: bright local basking, deep cover, high moisture availability and a genuine winter rest.

Enclosure and structure

For one adult, about 150 x 70 x 90 cm or larger is a useful indoor starting point; a compatible pair benefits from about 180 x 80 x 100 cm or more. Provide branches, cork, stable rocks, dense live/artificial vegetation, several visual barriers, multiple hides and 15-25 cm of diggable soil/leaf substrate. This species readily climbs shrubs and stone structure but also needs deep ground-level security.

Heat, gradient and UVB

Preferred body temperature has been measured around 33-35 C, while recent field observations averaged closer to 29 C in humid coastal habitat. Provide a local peak basking surface around 35-40 C in late spring/summer, but preserve extensive shaded air temperatures in the low 20s. A measured UVI around 2-3 at the primary basking zone is a cautious captive target, with dense cover below UVI 1.

Humidity and water

Humidity is not optional for this species. It is closely associated with stream margins and humid Atlantic vegetation and recent comparative field work found higher, less variable humidity around *L. schreiberi* than around *Timon lepidus*. Keep exposed surfaces ventilated rather than constantly wet, but maintain a reliably moist deep refuge, shaded planted zone and fresh drinking water at all times.

Winter rest

Healthy adults normally benefit from a real winter dormancy after full gut clearance. A frost-free 5-9 C rest for about 12-16 weeks is a conservative indoor starting point for animals of unknown provenance. Lowland coastal animals may use a milder rest; high-elevation stock can experience colder natural conditions. Keep the retreat slightly moist, well ventilated and protected from condensation or freezing.

Nest provision

From May onward provide at least 20 cm of cohesive, moist-but-aerated soil/sand/leaf substrate in a covered location. Wild nests have been found beneath stones with eggs partly buried in soil. Females can excavate long tunnels ending in a chamber, so a deep nest box is preferable to a shallow dish.

Adult diet

Use varied gut-loaded invertebrates as the staple: crickets, locusts, roaches, beetles/larvae in moderation, flies, spiders, earthworms and small snails. Field studies identify Coleoptera, ants and flies among important prey. Small amounts of soft seasonal fruit can be offered occasionally, but this is fundamentally an invertebrate-feeding lizard.

Juvenile diet

Feed appropriately sized live prey frequently during growth, with good calcium provision, UVB and many tiny humid retreats. Hatchlings dehydrate quickly if kept too dry. Keep juveniles separate from adults and provide several feeding stations if young are housed together.

Social management

Adult males are territorial and can fight violently; do not house adult males together. Even a breeding pair needs dense visual barriers, duplicate basking/feeding areas and immediate separation capacity. In spring watch females closely for persistent pursuit, bite injury, hiding, basking exclusion or loss of body mass.

Daily keeper checks

Check activity, gait, eyes/nose, mouth, skin, hydration, body condition, faeces and access to both warm and cool humid zones. In breeding females monitor abdominal contour, digging and calcium intake. During winter rest weigh periodically with minimal disturbance; investigate abnormal weight loss rather than repeatedly warming the animal.

Heat warning

This species is unusually vulnerable to excess heat, especially during embryonic development. Do not respond to summer hiding by raising whole-enclosure temperature. Maintain a bright basking patch but always offer cool shaded vegetation and a moist retreat. Good ventilation is essential at high humidity.

Breeding, Eggs and Evidence Notes

Strong field, experimental and long-term captive data support a cooler, moist incubation strategy and a single main annual clutch.

Breeding timing

Males emerge before females and spring courtship/mating occurs mainly from April into June. In montane Sistema Central populations reproduction is narrow and synchronized: laying occurs from the second half of June into early July, while lower and wetter populations can lay from mid-May onward. One annual clutch is typical in the well-studied montane population.

Clutch size and maturity

Montane females produced 7-24 eggs, mean about 13.7-14. IUCN summarizes average clutches around 11-18 eggs. Males generally mature earlier; most are adult after the second winter, while females commonly mature after the third or fourth winter, and the montane study recorded a minimum female maturity age of about four years.

Incubation - keep it cool

Natural nests average about 24 C and rarely exceed 30 C. Field incubation is commonly around 65-110 days, mean about 84. A practical starting point is 24-26 C, preferably around 24-25.5 C, in moist vermiculite/perlite without free water touching the eggs. A 26 C experimental incubation has been used successfully. Avoid sustained 28-30 C: earlier captive work at those temperatures produced dead-in-shell young and malformations, and modern experiments confirm that high temperature reduces reproductive success.

Egg hydration

Flexible-shelled eggs absorb substantial water during development and can approach three times their initial mass. Keep the incubation medium consistently moist but aerated. Experimental work shows dry substrate reduces egg water uptake and hatchling size, while excessive heat is a much more serious threat to survival than moderate differences in moisture.

Hatchlings

Hatching generally occurs from late July into September depending on laying date and nest temperature. Rear young with abundant cover, high access to moisture, modest ambient temperatures, a small basking zone and frequent small invertebrate meals. Do not use adult-level heat across the whole juvenile enclosure.

Accepted name: *Lacerta schreiberi* - High

Reptile Database currently recognizes *Lacerta schreiberi* Bedriaga, 1878; distribution is Spain and Portugal.

Humid stream/woodland association - High

Portuguese habitat studies and IUCN consistently link the species to humid shrub, woodland edges and especially stream margins.

Preferred body temperature ~33-35 C - High

Laboratory/ecophysiology studies place selected body temperature around 33.4-35 C; recent field observations in humid habitat averaged about 29 C.

One clutch; ~14 eggs; 65-110 d - High

Montane reproductive study: mean clutch 13.7-14 eggs, 7-24 range, mean incubation ~84 d, 65-110 d range.

Natural nest ~24 C; high heat harmful - High

Monasterio et al. found embryos strongly heat-sensitive; later synthesis reports mean natural nest temperature ~24 C, rarely >30 C.

UVI 2-3 / basking 35-40 C - Moderate

Operational captive translation from heliothermy, selected body temperature and shaded humid habitat use; not direct species-wide field UVI/surface prescriptions.

Key references

Reptile Database; Brito et al. 1998, Herpetological Journal 8:187-194; Marco, Perez-Mellado & Gil-Costa 1994, Herpetological Journal 4:49-55; Monasterio et al. 2013, Journal of Zoology 291:136-145; Marco et al. 2004 incubation moisture study; Biard 2001, Pod@rcis 2:8-14; Reyes-Puig et al. 2025.

UVI beneath the optional T5 tube

Lacerta schreiberi

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 / 1 late
March	1-2
April	2-3
May	2-3
June	2-3
July	2-3
August	2-3
September	2
October	1-2
November	Off / 1
December	Off

Retain numbers; clarify measurement

Retain the peak UVI 2-3 target. Its sheltered streamside habitat and absence of a species-specific UV study do not justify increasing it merely because other green lacertids have 3-4 targets. Keep both optional exposure and dense cover.

Evidence level: Provisional retention. 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; Brito et al. (1998), habitats of Lacerta schreiberi. Full rationale and monthly comparison: UVI_Audit_Report.html.