

Recommended Annual Husbandry Schedule

Phymaturus roigorum - Roig's rock lizard / Payunia matuasto

Range and identity An Argentine endemic of southern Mendoza's Payunia volcanic region; the type locality is Puesto Rojas, 16 km from Provincial Route 180 in El Nevado, San Rafael Department. Field ecology has been studied on Payun Matru and Payun Liso at about 2111-2372 m; recent genetic work also includes a Neuquen Route 37 population.	Climate and habitat Cold, arid volcanic uplands in the Monte-Patagonia transition. Winters are rainy or snowy and summers dry. This saxicolous lizard uses a wider variety of volcanic rocks than sympatric <i>P. payuniae</i> , including dark basalt, and depends on deep crevices for refuge and thermal buffering.	Thermal, diet and reproduction Measured preferred body temperature is 34.66 +/- 1.76 C . Wild animals are strictly herbivorous, selecting flowers and browse such as <i>Adesmia</i> , <i>Senecio</i> , <i>Schinus</i> , <i>Mulinum</i> and <i>Ephedra</i> while avoiding grasses. Viviparity is confirmed, but no species-specific litter-size or cycle study was located.
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Month	Day ambient	Night	Basking surface	UVI*	Photoperiod	Spray / water	Adult food offers*	Seasonal management
Jan	7-11 C	4-8 C	Off	Off	0-8 h	No spray; water check	None	Deep brumation
Feb	7-11 C	4-8 C	Off	Off	0-8 h	No spray; water check	None	Deep brumation
Mar	9-13 C	5-8 C	Off; 34-36 C late	Off / 1	8-9 h	No spray; water check	None / restart late	Staged emergence late
Apr	14-18 C	6-10 C	35-38 C	2-3	10.5 h	Light local spray 10-14 d	2-3	Emergence / reconditioning
May	18-22 C	8-12 C	37-40 C	3-4	12 h	Occasional local spray	5-6	Full activity / courtship
Jun	20-24 C	9-13 C	38-41 C	3-4	14 h	Occasional local spray	6-7	Peak activity / mating
Jul	21-25 C	10-14 C	38-41 C	3-4	14.5 h	Occasional local spray	6-7	Peak activity / gestation
Aug	20-24 C	9-13 C	38-40 C	3-4	13.5 h	Light local spray 10-14 d	5-6	Gestation / birth watch
Sep	17-21 C	7-11 C	36-39 C	2-3	12 h	Light local spray 10-14 d	4-5	Birth watch / recovery
Oct	13-17 C	6-9 C	34-37 C limited	1-2	10 h	Minimal local spray	1-2 then stop	Seasonal taper
Nov	8-12 C	4-8 C	Off	Off	8 h	No spray; water check	None	Cooling / brumation
Dec	7-11 C	4-8 C	Off	Off	0-8 h	No spray; water check	None	Deep brumation

Climate translation: this northern-hemisphere programme shifts the Payunia spring-summer field season by six months. Direct observations were made in November and January locally, with activity approximately 0900-1900 and emergence when external surfaces warmed above crevice temperature. Winter rain, snow and frost are context only: captive brumation is conservatively held above freezing at 4-8 C. Measure air, basking surface and refuge temperatures separately.

* UVI and food frequency are facility starting points, not published species-specific requirements. Adjust food to intake and body condition. No species-specific UV dose study was located; verify UVI with a meter and preserve complete shade inside crevices.

Brumation safety: cool only healthy, well-conditioned adults after feeding has stopped and the gut is clear. Record starting mass, perform planned visual checks, reweigh every 2-4 weeks or sooner if activity is abnormal, and reverse cooling for weight loss, dehydration, respiratory signs or continuing activity.

Practical Husbandry and Daily Management

A cold-arid Payunia specialist: stable volcanic rockwork, deep secure crevices, cool ambient air, strong local radiant heat and a long controlled winter rest define the model.

Enclosure and rockwork

For one adult, **150 x 75 x 70 cm is a facility minimum starting point, not a research-derived requirement**; 180 x 90 x 90 cm or larger is preferred for a compatible group. Build numerous tight horizontal and angled crevices across warm, intermediate and cool zones, using large stable rock masses that create genuine thermal inertia.

Support every rock and slab directly from the enclosure base; never stack loose stone on compressible substrate. Unlike the more rock-selective sympatric *P. payuniae*, *P. roigorum* occurs on many volcanic rock types, including dark basalt. Duplicate basking shelves, deep retreats and feeding stations so one dominant animal cannot monopolize resources.

Heat, light and UVB

Species-specific work measured a preferred body temperature of **34.66 +/- 1.76 C**. Both Payunia species actively thermoregulate, but *P. roigorum* had lower field body temperatures and lower precision than *P. payuniae*; its basking bouts sometimes exceeded three hours under cloudy conditions. Do not make the whole enclosure hot.

Start with a broad, fully escapable **38-41 C local basking surface**, active-season air of about **18-25 C**, strong ventilation and cool deep retreats. Provide bright visible light and measured **UVI 3-4** only as a cautious facility starting point; keep complete shade below UVI 1 inside crevices.

Water, spray and air quality

Keep shallow fresh water available, including during cooling. Payunia winters are rainy or snowy and summers dry. Maintain a dry, well-ventilated surface, lightly wet one local area every 10-14 days in the active season, and allow exposed stone and substrate to dry completely. No species-specific humidity target is known.

Diet and feeding

Direct field observations confirm strict herbivory and selective use of leaves, flowers and browse. *P. roigorum* preferred *Adesmia pinnifolia* and *Senecio filaginoides* at one site, also selected *Schinus johnstonii* or *Mulinum spinosum* by site and season, and uniquely consumed the hard-stemmed *Ephedra chilensis*. Grasses were avoided.

In captivity rotate dandelion, plantain, sow-thistle, endive, escarole, calcium-rich browse, herbs and edible flowers. Do not assume a need for animal protein. Offer fresh fibrous plant material daily during peak activity, taper with intake and stop only after the gut has cleared before brumation.

Social management and handling

Field animals shared basking rocks, refuges and even feeding plants with *P. payuniae*, but occasional chasing and head-bob displays occurred. Captive compatibility is not guaranteed. Use one adult male only, duplicate heat, feeding and crevice access, and retain immediate separation capacity.

Daily keeper checks

Check	Record
Activity	Emergence, basking duration, crevice choice and locomotion
Feeding	Plant mix offered, selection, intake, water and faeces
Condition	Mass trend, jaw, eyes, skin, toes, abdomen and wounds
Environment	Basking surface, warm/cool air, UVI and crevice temperature

Veterinary triggers

Seek reptile-veterinary assessment for persistent weight loss, jaw or limb swelling, weakness, abnormal breathing, bite wounds, failure to bask after warm-up, continuing activity during deep cooling, or a gravid female with declining condition. Quarantine and faecal screening are prudent for all new animals.

Breeding, Viviparity and Evidence Review

Viviparity is confirmed for *P. roigorum*, but no species-specific litter-size, mating-date or gestation study was located. The programme therefore separates verified ecology from conservative palluma-group operating assumptions.

Seasonal breeding management

Cool only healthy, well-conditioned adults. Direct field studies confirm activity in native spring (November) and summer (January), while the cold Payunia winter is inactive. Shift that southern cycle by six months: stage emergence in March-April and maintain full activity from May through September.

A species-specific mating month is not published. Treat May-July as an observational window rather than a guaranteed breeding period. Use visual contact through a divider before direct introduction, supervise every introduction and record courtship, chasing and confirmed mating separately.

Gestation and maternal care

Provide a potentially gravid female unrestricted access to the full thermal gradient, abundant calcium-rich forage and multiple secure crevices. Avoid forced handling and chronic disturbance. Use mass trend, abdominal contour, appetite and reptile-veterinary ultrasound to follow development.

Related palluma-group species commonly have prolonged, low-output cycles and may reproduce biennially, but that has not been demonstrated for *P. roigorum*. Do not force annual breeding and do not publish an assumed litter size as a species fact. Separate a female if the male interferes with basking or feeding.

Births and neonates

Because direct timing is unavailable, maintain birth watch across the entire active season, especially August-October after the six-month shift. Prepare a quiet neonatal-safe enclosure before this window and obtain veterinary imaging rather than estimating gestation from external appearance alone.

Record birth date, litter size, neonatal mass and length, stillbirths, placental material and maternal recovery. Neonates are sensitive to excessive heat; provide simple secure units with narrow refuges, a broad gradient, measured low-to-moderate UVB and finely cut leafy forage.

Evidence confidence

Topic	Confidence and application
Identity / range	High: original description, current database and field localities
Habitat / diet	High: direct species-specific rock-use, activity and feeding observations
Climate	Moderate-high: field-site seasonality and measured crevice temperatures
Thermal / UV / size	High for preferred temperature; low for captive UVI and enclosure dimensions
Breeding / litter	Low: viviparity confirmed; detailed species cycle and litter size not published

How climate was translated

Species ecology was studied at 2111 m near Payun Liso and 2372 m on Payun Matru. The climate is arid and cold, with rainy or snowy winters and dry summers. In November and January, crevices averaged about 14.18 C and 20.04 C respectively; lizards emerged as rock and air warmed above the crevices and retreated as 1 m air fell below 21 C. Outdoor frost is not a captive target.

Record set for every breeding attempt

Individual IDs and provenance; dates of temperature and light changes; mass trend; food intake; basking and crevice use; introductions and aggression; courtship and confirmed mating; ultrasound findings; gestational mass trend; birth date; litter size; neonatal measurements; stillbirths and maternal recovery.

Key references

- Lobo & Abdala (2007), Cuadernos de Herpetologia 21: original description and Puesto Rojas type locality.
- Corbalan, Debandi & Kubisch (2013), Journal of Thermal Biology 38: rock use, preferred temperature and thermoregulation.
- Corbalan & Debandi (2014), Herpetological Journal 24: Payunia climate, activity, diet selection and interspecific behaviour.
- The Reptile Database (current account): accepted identity, Mendoza distribution and viviparity.
- Morando et al. (2013) and later Argentine barcode work: roigorum-lineage distribution and population structure.

UVI beneath the optional T5 tube

Phymaturus roigorum

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	Off / 1
April	2-3
May	3-4
June	3-4
July	3-4
August	3-4
September	2-3
October	1-2
November	Off
December	Off

Retain numbers; clarify measurement

The retained range remains a provisional captive working target. No new species-specific result was found that clearly requires a numerical change. Retaining it is not certification of an experimentally established optimum.

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. Full rationale and monthly comparison: [UVI_Audit_Report.html](#).