Recommended Annual Husbandry Schedule

Phymaturus verdugo - Verdugo rock lizard

Range and habitat

Confirmed study sites are on rocky Andean slopes and river gorges in south-western Mendoza, Argentina, at about 1815-1941 m. Deep crevices in broken rock are essential shelter. Older literature also attributed northern Neuquen records to this species.

Thermal biology

A 2024 species-specific study measured mean preferred body temperature at 36.6 C (central range about 35.5-37.7 C). Summer field body temperatures were lower, about 31.5-34.0 C, showing the need for behavioural choice rather than uniform heat.

Diet and reproduction

Direct observations and faecal remains support herbivory. The species is viviparous. Argentina's 2012 assessment reports births of two young, but precise mating, gestation and birth timing remain poorly documented.

Month	Day ambient	Night	Basking surface	UVI*	Photoperiod	Spray / water	Adult food offers*	Seasonal management
Jan	10-14 C	3-6 C	Off	Off	8 h	No spray; water check	None	Inactive / brumation
Feb	10-14 C	3-6 C	Off	Off	9 h	No spray; water check	None	Inactive / brumation
Mar	14-18 C	5-8 C	40-42 C	2-3	10 h	Light local mist 1x/wk	1-2	Staged warm-up
Apr	18-22 C	6-10 C	42-44 C	3-4	11 h	Light local mist 1-2x/wk	3-4	Full activity resumes
May	20-23 C	8-12 C	44 C	3-4	12.5 h	Light local mist 1-2x/wk	4-5	Assess condition / compatibility
Jun	22-24 C	10-14 C	44 C	3-4	14.5 h	Light local mist 1-2x/wk	4-5	Peak activity; record courtship
Jul	22-24 C	10-14 C	44 C	3-4	14 h	Light local mist 1-2x/wk	4-5	Peak activity; record mating
Aug	20-22 C	9-13 C	44 C	3-4	13 h	Light local mist 1-2x/wk	4	Monitor condition / reproduction
Sep	18-20 C	8-12 C	42-44 C	3	11.5 h	Light local mist 1-2x/wk	3	No assumed birth deadline
Oct	15-18 C	6-10 C	40-42 C	2-3	10 h	Light local mist ~1x/wk	1-2	Autumn taper
Nov	10-14 C	4-8 C	Off	Off / 1	9 h	No scheduled spray	Stop after gut clears	Cooling down
Dec	8-12 C	2-5 C	Off	Off	8 h	No spray; water check	None	Inactive / brumation

Moisture note: low spraying does not mean extremely low RH. During the active season use light localized misting rather than soaking the enclosure; a practical starting range is about **40-55% daytime RH**, commonly rising to **55-70% at night**. Keep strong ventilation and let exposed rock/substrate dry between events. During deep cooling, avoid scheduled spraying and cold-wet substrate.

Operating note: the day, night, basking and photoperiod values preserve the supplied northern-hemisphere operating cycle. Measure air and basking-surface temperatures separately and retain a cool crevice refuge whenever basking heat is available.

* 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-climate, rock-dwelling herbivore whose welfare depends on secure crevices, intense local basking and strong seasonal cooling.

Enclosure and rockwork

For one adult, **150 x 75 x 70 cm is a facility minimum starting point, not a research-derived requirement**; 180-200 cm length is preferred. Build several horizontal and angled crevices that provide close body contact without abrasion, across warm, intermediate and cool zones.

Support every rock and slab directly from the enclosure base; never stack loose stone on compressible substrate. Cork-backed artificial rock modules are easier to inspect safely. Provide a dry mineral surface with small patches of compact soil for planting and forage presentation.

Heat, light and UVB

The species-specific study found a mean preferred body temperature of **36.6 C**, with a central selected range around **35.5-37.7 C**; summer field body temperatures averaged about **31.5-34.0 C**. The 40-44 C chart value is a **local basking-surface setting, not a target body temperature**. Do not heat the whole enclosure to that level.

Provide bright visible light and an escapable basking zone. A measured **UVI 3-4** is retained only as a conservative facility starting point because no species-specific UVB-dose study was located. Keep complete shade below UVI 1 in crevices and measure at the animal's back height.

Water, spray and air quality

Keep shallow fresh water available and maintain strong ventilation with a predominantly dry surface. This is a cold mountain species from a locality with substantial precipitation, much of it as snow, and animals occur near streams; therefore **low misting frequency should not be interpreted as desert-level humidity**.

During the active season use light localized misting about **1-2 times weekly**, preferably wetting one rock/refuge zone rather than the entire enclosure. As a practical starting point, aim for roughly **40-55% daytime RH**, with normal nocturnal rises around **55-70%**. Allow exposed rock and substrate to dry between events. During winter cooling, avoid routine spraying and never combine very cold temperatures with persistently wet substrate.

Diet and feeding

Base the active-season diet on pesticide-free fibrous leaves, edible weeds, browse and flowers. Rotate dandelion, plantain, sow-thistle, endive, escarole, mulberry, grape leaves and suitable local browse. Use small amounts of squash or similar vegetables for variety; fruit should be rare.

Field observations and faecal remains support a strongly herbivorous diet. Do not use insects or animal protein as routine foods. Offer small fresh portions frequently in full activity, reducing sharply during autumn and stopping only after the gut is clear before brumation. Use calcium and vitamins conservatively according to diet and measured UVB.

Social management and handling

Field workers saw solitary basking males, but also males with females and juveniles. This does not prove unrestricted captive compatibility. Use only one adult male per enclosure, duplicate basking sites and crevices, and maintain immediate separation capacity. House singly if there is chasing, biting, refuge exclusion or suppressed feeding.

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, Gestation and Evidence Review

This is a viviparous species. A litter of two has been reported, but species-specific mating, gestation and birth timing remain poorly documented; records and ultrasound should drive decisions.

Seasonal breeding management

Cool only healthy, well-conditioned adults and warm them gradually in March. Delay any introduction until both animals bask, feed and defecate normally. Because precise species-specific breeding months are unconfirmed, treat the active-season timing in this protocol as an operational starting point rather than a proven reproductive calendar.

Use visual contact through a divider before direct introduction and duplicate heat, feeding and crevice access. Supervise introductions and separate for biting, sustained pursuit, pinning, crevice blocking or food exclusion. Record courtship and confirmed mating separately.

Gestation and maternal care

Provide gravid females 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.

Separate a female if the male interferes with basking or feeding. Provide a quiet enclosure with small neonatal-safe crevices well before any suspected birth. Sudden weakness, straining, abnormal discharge or prolonged decline requires immediate reptile-veterinary assessment.

Births and neonates

Argentina's 2012 conservation assessment states that females have been observed giving birth to **two young**. It does not establish a full litter-size range or dependable birth season. Related Phymaturus show prolonged, sometimes biennial female cycles and very low annual output; apply that only as comparative caution.

Record birth date, litter size, neonatal mass and total length, stillbirths, placental material and maternal recovery. House neonates in simple secure units with narrow crevices, gentle thermal gradients, measured low-to-moderate UVB and finely cut leafy forage. Do not assume annual reproduction.

Evidence confidence

Topic	Confidence and application
Taxonomy / range	High at Mendoza study sites; older Neuquen assignments are reported separately
Habitat / diet	High-moderate: direct field observations and faecal remains
Thermal biology	High: species-specific field and laboratory study published in 2024
Captive UV / size	Low: facility starting points; not experimentally validated
Breeding / litter	Moderate for viviparity and reported two young; timing remains low

How the source sheet was used

The supplied northern-hemisphere day, night, basking, photoperiod and spray programme was retained as the facility's operating cycle. This audit adds the 2024 species-specific thermal results, labels UV, enclosure size and feeding frequency as starting points, and removes any claim that exact breeding or birth months are proven.

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

1. Supplied facility climate chart (northern hemisphere): operating cycle.
2. Cei & Videla (2003), Boll. Mus. Reg. Sci. Nat. Torino 20(2):291-314: type locality, climate, habitat, diet and social observations.
3. Moreno Azocar et al. (2024), Biological Journal of the Linnean Society 143(4): blae104: species-specific thermal biology.
4. Corbalan (2012), Cuadernos de Herpetologia 26 (Suppl. 1):287: range, viviparity and reported births of two young.
5. Cabezas-Cartes et al. (2010), Herpetological Conservation and Biology 5(3):489-499: comparative reproductive context only.

UVI beneath the optional T5 tube

Phymaturus verdugo

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