

Recommended Annual Husbandry Schedule

Phymaturus excelsus - distinguished rock lizard (excelsus morph of P. spurcus)

Identity and range P. excelsus was described from volcanic outcrops 1 km northwest of Ojo de Agua, Rio Negro, Argentina, at 1141 m. Integrative genetic, morphological and breeding work later placed it with P. agilis and P. spectabilis in synonymy under P. spurcus; this sheet retains the familiar excelsus name while flagging the current treatment.	Climate and habitat Cold, arid Patagonian shrub-steppe: isolated volcanic outcrops, steep rock faces, gravel, sparse low shrubs and grasses, frequent frost and strong wind. Nearby Ingeniero Jacobacci averages roughly -2 to 25 C across the year; exposed air is not a crevice temperature, so never copy outdoor extremes inside captivity.	Diet and reproduction The form is described as herbivorous and viviparous; flowers and fruits are documented foods in Phymaturus. At Ojo de Agua, two females with a spurcus-like phenotype produced respectively two and one live young of the excelsus morph from late February to mid-March, illustrating the intergrading population and current synonymy.
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Month	Day ambient	Night	Basking surface	UVI*	Photoperiod	Spray / water	Adult food offers*	Seasonal management
Jan	8-12 C	2-5 C	Off	Off	8 h	No spray; water check	None	Dormant; monitor mass
Feb	10-14 C	3-6 C	Off; 36-38 late	Off / 1	9 h	No spray; water check	None / late restart	Staged warm-up late
Mar	14-18 C	5-8 C	38-40 C	2-3	10 h	Light spray every 10-14 d	1-2	Warm-up; courtship may begin
Apr	18-21 C	7-10 C	40-42 C	3-4	11.5 h	Light spray every 10-14 d	3-4	Primary mating period
May	20-23 C	8-12 C	41-43 C	3-4	13 h	Occasional local spray	4-5	Early gravidity
Jun	21-24 C	10-13 C	41-43 C	3-4	14 h	Occasional local spray	4-5	Gravidity
Jul	22-25 C	11-14 C	41-43 C	3-4	14.5 h	Occasional local spray	4-5	Late gestation
Aug	21-24 C	10-13 C	40-42 C	3-4	13.5 h	Light spray every 10-14 d	4-5	Births may begin
Sep	18-22 C	8-12 C	39-41 C	2-3	12 h	Light spray every 10-14 d	3-4	Main birth / recovery window
Oct	15-18 C	6-9 C	37-39 C	2	10.5 h	Minimal local spray	1-2	Autumn taper
Nov	10-14 C	4-7 C	Off late	Off / 1	9 h	No spray; water check	Stop after gut clears	Cooling down
Dec	8-12 C	2-5 C	Off	Off	8 h	No spray; water check	None	Inactive / brumation

Climate translation: this northern-hemisphere programme shifts the native September-April activity season by six months. It is anchored to the high, cold and dry Ojo de Agua / Ingeniero Jacobacci region, not to a generic desert profile. 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, saxicolous herbivore: secure volcanic-rock crevices, intense local basking and a long cool rest are central to the model.

Enclosure and rockwork

For one adult, **150 x 75 x 90 cm is a facility minimum starting point, not a research-derived requirement**; 180 x 90 x 100 cm or larger is preferred for a compatible unit. Build tight horizontal and angled crevices across warm, intermediate and cool zones, plus robust shrub-like climbing structure.

Support every rock and slab directly from the enclosure base; never stack loose stone on compressible substrate. Field work describes this population on moderately steep, rock-dominated volcanic outcrops. Provide stable ledges at several heights, narrow body-contact crevices and multiple sight breaks.

Heat, light and UVB

No Ojo de Agua-specific preferred-temperature experiment was located. Published modelling for the closely related and synonymized *P. spectabilis* form used a **20 C activity threshold** and a mean preferred body temperature of **33.7 C**; the underlying preference value was cited there as unpublished. Treat 39-43 C as a **local basking-surface starting point, not a body-temperature target**, and retain a much cooler refuge.

Provide bright visible light and an escapable basking zone. Measured **UVI 3-4** at the basking position is a cautious facility starting point because no species-specific UV dose study was located. Keep complete shade below UVI 1 in deep crevices and measure at the animal's back height.

Water, spray and air quality

Keep shallow fresh water available, including during cooling. Maintain strong ventilation and a predominantly dry surface. Nearby regional climate is dry, with most precipitation outside midsummer. Use only localized light wetting and let all exposed surfaces dry; avoid cold, persistently damp rockwork.

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 or grape leaves, safe flowers and suitable browse. Small fruit portions may reflect observed flower/fruit use, but should not displace fibrous greens.

Direct accounts characterize the form as herbivorous, while genus-level studies document flowers and fruits. No species-specific evidence was located for routine animal prey: do not use insects or other animal protein as a staple. Use calcium and vitamins conservatively according to the diet and measured UVB.

Social management and handling

Use only one adult male per enclosure, duplicate basking sites, feeding points and crevices, and retain immediate separation capacity. House singly if there is sustained pursuit, biting, refuge exclusion, suppressed basking or reduced feeding. Avoid unnecessary handling, especially during gestation and cooling.

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

At Ojo de Agua, two spurcus-pattern females produced one or two live young of the excelsus morph from late February to mid-March; the keeper calendar below shifts that documented window by six months.

Seasonal breeding management

Cool only healthy, well-conditioned adults and warm them gradually from late February into March. Research on the same synonymized species complex places mating and ovulation in the first half of native spring, gestation from mid-spring and births in mid-summer. The northern-hemisphere translation therefore places primary mating in March-April and births mainly in August-September.

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.

Female cycles in the closely studied synonym complex are annual-biennial and individuals may skip a year; males are reported to cycle annually. Do not force yearly breeding. Separate a female if the male interferes with basking or feeding, and provide a quiet birth enclosure well before August.

Births and neonates

The strongest site-specific record is **one or two offspring per female**, born from **late February to mid-March** locally, equivalent to about **late August to mid-September** in this northern-hemisphere operating cycle. Both mothers looked like the spurcus morph while all three young showed the excelsus morph, supporting the later synonymy.

Record birth date, litter size, neonatal mass and 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.

Evidence confidence

Topic	Confidence and application
Identity / range	High: 2005 description plus 2019 integrative synonymy; current databases use <i>P. spurcus</i>
Habitat / diet	Moderate-high: type locality and direct volcanic-outcrop observations; diet evidence is partly genus-level
Climate	Moderate: nearby Ingeniero Jacobacci regional climate; exposed outcrops and crevices create stronger microclimates
Thermal / UV / size	Moderate for published thermal model; low for captive UVI and enclosure dimensions
Breeding / litter	High for the two Ojo de Agua litters; moderate-low for a full form-specific seasonal sequence

How climate was translated

The wild population is active through the Southern Hemisphere spring, summer and early autumn and shelters in rock fissures through winter. This sheet shifts that biological cycle by six months for northern operation. Native air extremes are context only: captive refuge temperatures must remain measured, stable and above freezing.

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 & Quinteros (2005), Journal of Herpetology 39:113-119: original description of *P. excelsus*, type locality, diagnosis and restricted rocky habitat.
- Becker et al. (2019), Zoological Journal of the Linnean Society: molecular, morphological and breeding evidence synonymizing *agilis*, *spectabilis* and *excelsus* under *P. spurcus*.
- Becker et al. (2019): two Ojo de Agua females with spurcus morphology produced three excelsus-morph young, one or two per litter, from late February to mid-March.
- Ibarguengoytia et al. (2016), Science of the Total Environment 543:484-491: Ojo de Agua habitat, volcanic-ash exposure and locomotor ecology.
- Kubisch et al. (2016), Journal of Thermal Biology 62: field thermal modelling for *P. spectabilis*; preferred temperature value cited there as unpublished.

UVI beneath the optional T5 tube

Phymaturus excelsus

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
March	2-3
April	3-4
May	3-4
June	3-4
July	3-4
August	3-4
September	2-3
October	2
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](#).