Recommended Annual Husbandry Schedule

Uromastyx aegyptia - Egyptian spiny-tailed lizard

Habitat basis
Open desert and semi-desert from Egypt east of the Nile through the Levant and Arabian Peninsula to Iraq and Iran. Arabian populations favour hard, diggable gravel plains and sparse vegetation rather than deep loose sand.

Natural history
The largest Uromastyx, exceeding 70 cm and 2.5 kg. Excavated wild burrows measured 3-5.3 m long and 0.8-1.2 m deep, buffering extreme surface heat and humidity.

Legal status
IUCN Vulnerable; CITES Appendix II. Keep acquisition, transfer and breeding records. Confirm current national and local requirements before movement or sale.

Month	Day ambient	Night	Basking surface	UVI	Photoperiod	Lamp hours	Day / night RH	Feeding	Seasonal management
Jan	18-20 C	11-13 C	36-40 C	2	9 h	4 h	25-30 / 35-45%	None	Core cooling
Feb	20-22 C	12-14 C	40-44 C	2-3	10 h	5 h	25-30 / 35-45%	None; restart late	Staged emergence
Mar	24-27 C	15-17 C	45-48 C	4	11 h	7 h	20-30 / 30-40%	3-4 feeds	Conditioning
Apr	27-30 C	18-20 C	48-52 C	5	12 h	9 h	20-30 / 30-40%	Daily	Courtship
May	29-32 C	20-22 C	50-55 C	5-6	13 h	10 h	20-30 / 30-40%	Daily	Mating / follicles
Jun	31-34 C	22-24 C	50-55 C	5-6	14 h	11 h	20-30 / 30-40%	Daily	Gravid / laying watch
Jul	32-35 C	23-25 C	50-55 C	5-6	14 h	11 h	20-30 / 30-40%	Daily	Laying / incubation
Aug	32-35 C	23-25 C	50-55 C	5-6	13.5 h	10 h	20-30 / 30-40%	Daily	Field hatchling season
Sep	30-33 C	21-23 C	48-52 C	4-5	12.5 h	9 h	20-30 / 30-40%	5-6 feeds	Recovery
Oct	26-29 C	18-20 C	45-48 C	4	11 h	7 h	20-30 / 30-40%	3-4 feeds	Autumn transition
Nov	22-25 C	14-16 C	40-44 C	3	10 h	5 h	25-30 / 35-45%	Taper; then stop	Pre-cooling
Dec	18-20 C	11-13 C	36-40 C	2	9 h	4 h	25-30 / 35-45%	None	Core cooling

Operating note: this is a captive-facility starting schedule, not a published species standard. Adjust gradually from measured enclosure temperatures, UVI, body mass, appetite, faecal output and behaviour. The hotspot must always be escapable.

Winter note: cool only healthy, well-conditioned adults after feeding has stopped and the gut has cleared. Retain a short daily basking opportunity; restart food only after normal heat and activity have been restored.

Practical Husbandry and Daily Management

A giant, plant-dominant desert burrower requiring exceptional floor area, deep engineered refuges and broad radiant heat.

Enclosure, burrow and substrate

Use approximately **240 x 120 x 100 cm or larger for one adult**; larger adults benefit from substantially more floor area. Provide at least **30-40 cm of compactable substrate** and deeper zones where construction permits. A practical mix is coarse sand with clay-rich soil and a smaller topsoil fraction.

Wild burrows can exceed 5 m, so use engineered sloping pipes and insulated chambers where that cannot be replicated safely. Provide more than one cool retreat. Anchor all stone and slate from the enclosure floor before adding substrate so excavation cannot cause collapse.

Heat, light and UVB

During full activity provide warm-side air around **29-35 C**, a cooler retreat and a broad measured surface around **48-55 C**. Use a lamp bank sized for the whole adult rather than one narrow beam. The animal must be able to move directly into shade or the burrow.

Target **UVI 4-6** at the principal active-season basking position, with complete shade in the burrow and additional areas below UVI 1. Measure UVI at animal height and replace lamps according to meter readings rather than calendar age alone.

Water and humidity

Keep a stable shallow dish of fresh water available and change it daily. Maintain a dry, well-ventilated surface but a slightly more humid deep retreat. Field burrows buffer enormous humidity swings, so do not equate dry surface air with a uniformly desiccated enclosure. Avoid routine misting of the animal.

Diet and feeding

Base the diet on varied high-fibre leaves, safe weeds and flowers: dandelion, plantain, clover, mulberry, hibiscus, chicory, endive, escarole, collard and similar items. Wild diets are primarily herbivorous; animal matter was estimated at only **1-2%** of intake.

Offer generous fresh plant food daily during full activity and reduce volume with the seasonal taper. Seeds and soaked pulses can be small supplements rather than the base. Adults do not require routine animal protein. Use plain calcium as appropriate to the diet and measured UVB.

Social management

Treat adults as individually managed unless a stable pair or group has demonstrated compatibility. Provide duplicate basking, feeding and refuge resources. Separate for biting, persistent chasing, burrow exclusion, suppressed feeding or basking, or declining mass.

Daily keeper checks

Check	Record
Activity	Emergence, basking, digging, retreat use and abnormal hiding
Feeding	Items offered, intake and any food exclusion
Condition	Mass trend, jaw, eyes, skin, tail, feet and faeces
Environment	Hotspot surface, warm/cool air, UVI, burrow stability and water

Veterinary triggers

Seek reptile-veterinary assessment for persistent anorexia, marked weight loss, jaw swelling, weakness, abnormal breathing, repeated unproductive digging, retained eggs, wounds or failure to use heat normally. Quarantine and faecal screening are prudent for new animals.

Breeding, Nesting and Evidence Review

Field reproduction is documented, while detailed species-specific captive incubation data remain limited; record outcomes rather than converting genus norms into facts.

Seasonal breeding management

Use December-February cooling followed by a staged increase in heat, day length and feeding. Field courtship and mating were observed in mid-May, and hatchlings appeared in August and September. Record first emergence, display, mating, digging, laying and recovery for each individual.

Nest provision

Provide a private nesting route before a female appears gravid: at least 30-40 cm of warm, cohesive substrate leading to a horizontal chamber. Field burrows measured 3-5.3 m long and 0.8-1.2 m deep, demonstrating that a shallow open tray alone does not reproduce normal retreat architecture.

Keep several zones available rather than forcing one moisture level. The laying chamber should be slightly damp enough to hold shape, not wet. Monitor digging remotely where possible and avoid repeated disturbance. After laying, assess the female's hydration and body mass and restore food and heat promptly.

Eggs and incubation

Sixteen empty eggshells were documented in one wild burrow side chamber. Broader claims of 20-40 eggs occur in secondary sources, but should not be treated as a guaranteed clutch range for every subspecies, age or female.

A cautious captive starting range is **30-32 C**, with eggs resting above rather than directly on wet medium. Published breeder reports for the genus often span roughly 75-90 days, but verify the method against experienced U. aegyptia breeders and log temperature, fertility, egg mass and hatch dates.

Evidence confidence

Topic	Confidence and application
Distribution / habitat	High: peer-reviewed field survey and taxonomic sources
Burrow architecture	High: measured field burrow; use to design deep, stable retreats
Plant-dominant diet	High: field observations; insects are occasional
Captive seasonal table	Moderate-low: facility starting points, to be revised from records
Clutch / incubation	Moderate-low: 16 field shells documented; captive values remain provisional

Source corrections applied

Peak ambient temperature was reduced from 37 C to preserve a usable gradient while retaining a 50-55 C basking surface. Routine UVI 7 and 6 C winter nights were removed. The fixed weekly mist was replaced by a dry surface plus protected humid retreat, and clutch claims were tied to documented evidence.

Record set for every breeding attempt

Individual IDs; dates of seasonal changes; weekly mass; feeding; courtship and mating dates; first digging; laying date and clutch data; egg dimensions and mass; incubator and media details; temperature logger export; fertility; hatch dates; neonatal mass; post-lay recovery and complications.

Key references

1. Wilms, T.M., Wagner, P., Shobrak, M., Lutzmann, N. & Böhme, W. (2010). Aspects of the ecology of the Arabian spiny-tailed lizard Uromastyx aegyptia microlepis at Mahazat as-Sayd protected area, Saudi Arabia. Salamandra 46:131-140.

2. AlRashidi, M. et al. (2025). Daily and seasonal activity patterns of the spiny-tailed lizard Uromastyx aegyptia in northern Saudi Arabia. Life 15:735.

3. AlRashidi, M. et al. (2021). Habitat selection by the spiny-tailed lizard Uromastyx aegyptia. Saudi Journal of Biological Sciences 28:6204-6210.

4. O'Donovan, D. & O'Riordan, R. (2018). Translocation trial of spiny-tailed lizard or dhub in Dubai, United Arab Emirates. In: IUCN Global Reintroduction Perspectives.

Important: This is an evidence-informed working protocol, not a controlled experimental standard. Measure heat and UVI directly, change seasonal parameters gradually, and revise the schedule from documented health and breeding outcomes.

UVI beneath the optional T5 tube

Uromastyx aegyptia

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	2
February	2-3
March	4
April	5
May	5-6
June	5-6
July	5-6
August	5-6
September	4-5
October	4
November	3
December	2

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.