Recommended Annual Husbandry Schedule

Uromastyx ornata - Ornate mastigure

Range and taxonomy
Egypt including Sinai, Israel, Saudi Arabia and Yemen. Two subspecies are recognized: U. o. ornata in eastern Egypt, Israel and Saudi Arabia, and U. o. philbyi in western Saudi Arabia and northwestern Yemen. Jordan is only a questionable or possible record.

Habitat and form
Steep rocky wadis, mountain slopes, cliffs and fissured desert outcrops. A colourful, agile, sexually dichromatic species reaching about 35 cm total length and using elevated ledges and deep rock crevices extensively.

Conservation and trade
IUCN Least Concern and CITES Appendix II. Retain complete acquisition, transfer and breeding records; historic trade data contain taxonomic confusion with U. ocellata.

Month	Day ambient	Night	Basking surface	UVI	Photoperiod	Lamp hours	Surface / refuge RH	Adult feeding	Seasonal management
Jan	18-21 C	14-16 C	38-42 C	2-3	8 h	4 h	25-35 / 35-45%	1 light feed	Cool maintenance
Feb	20-23 C	15-17 C	42-46 C	3	9 h	5 h	25-35 / 35-45%	2-3 feeds	Staged warm-up
Mar	24-27 C	17-19 C	48-52 C	4-5	10 h	7 h	20-30 / 30-40%	5-6 feeds	Conditioning / courtship
Apr	27-30 C	19-21 C	50-55 C	5-6	11 h	9 h	20-30 / 30-40%	Daily	Courtship / mating
May	29-32 C	21-23 C	50-55 C	5-6	13 h	11 h	20-30 / 30-40%	Daily	Mating / gravid
Jun	30-33 C	22-24 C	50-55 C	5-6	14 h	12 h	20-30 / 30-40%	Daily	Laying / recovery
Jul	31-34 C	23-25 C	50-55 C	5-6	14 h	12 h	20-30 / 30-40%	5-6 feeds	Peak summer
Aug	30-33 C	22-24 C	50-55 C	5-6	13 h	11 h	20-30 / 30-40%	5-6 feeds	Summer / hatchlings
Sep	28-31 C	20-22 C	48-52 C	4-5	12 h	9 h	20-30 / 30-40%	5-6 feeds	Recovery
Oct	25-28 C	18-20 C	45-49 C	4	10.5 h	7 h	25-35 / 35-45%	3-4 feeds	Autumn transition
Nov	21-24 C	16-18 C	41-45 C	3	9 h	5 h	25-35 / 35-45%	2-3 feeds	Taper
Dec	18-21 C	14-16 C	38-42 C	2-3	8 h	4 h	25-35 / 35-45%	1 light feed	Cool maintenance

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: use mild cooling only for healthy, well-conditioned adults. Retain a daily basking opportunity and offer small meals only after full basking. Do not combine cold conditions with recent feeding or impose deep brumation without stock-specific evidence.

Practical Husbandry and Daily Management

A colourful Middle Eastern cliff and wadi specialist requiring intense light, broad radiant heat, anchored climbing structure and carefully supervised breeding introductions.

Enclosure, burrow and substrate

Use approximately **150 x 75 x 90 cm or larger for one adult**. A compatible pair needs at least 180 x 90 x 100 cm, duplicate resources and immediate separation capacity. The supplied 120 x 70 x 50 cm enclosure is too restricted for long-term adult management. Provide **20-30 cm of compactable sand-clay loam**, with a deeper nesting zone where construction permits.

Build usable height with anchored shelves, boulder faces, narrow vertical and horizontal crevices and at least two secure retreats. Fix every stone and slab from the enclosure floor before adding substrate. Never balance heavy rock on excavatable soil.

Heat, light and UVB

During full activity provide warm-side air around **29-34 C**, a cooler retreat and broad measured surfaces around **50-55 C**. Use several heated ledges rather than one small hotspot; measure surface and air temperatures separately.

Target **UVI 5-6** 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, especially for gravid and post-lay females. Maintain a dry, well-ventilated surface and one slightly humid deep refuge. Avoid routine whole-enclosure misting and do not keep the burrow wet.

Diet and feeding

Base the diet on varied high-fibre leaves, safe weeds and flowers: dandelion, plantain, sow thistle, chicory, endive, escarole, collard, mulberry and hibiscus. Uromastyx are primarily herbivorous; routine animal protein is unnecessary.

Offer adults **5-6 times weekly** through full activity and daily during breeding, gravidity and post-lay recovery, adjusted to intake and condition. Soaked lentils, split peas and mixed seeds are small supplements rather than the base. Use plain calcium according to diet and measured UVB.

Social management

Treat adults as individually managed unless a stable pair has demonstrated compatibility. Bright colour and apparent calm do not predict social safety. Provide multiple spaced basking shelves, feeding points and crevices; separate for injuries, chasing, exclusion, suppressed basking or feeding, 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, origin records and faecal screening are prudent for new animals.

Breeding, Nesting and Evidence Review

Species-specific breeder records exist, but seasonal and incubation values remain working ranges that must be refined from individual and clutch records.

Seasonal breeding management

Use December-January mild cooling followed by a staged February-March warm-up. Captive records place mating from late February through April and laying mainly from April through June. Treat these as working facility windows rather than guaranteed dates.

Introduce animals under direct observation and remove either animal immediately if courtship becomes injurious or access to heat, food or refuge is blocked. Both sexes may become aggressive after breeding; do not assume a previously stable pair remains safe.

Nest provision

Provide a private nesting route before a female appears gravid: at least **25-30 cm** of warm, cohesive sand-clay loam leading to a horizontal chamber. Offer more than one temperature and moisture choice. The chamber should be only damp enough to hold shape, never wet.

Monitor digging remotely and avoid repeated disturbance. After laying, record the female's mass, palpation or imaging findings, hydration, appetite and faeces; provide daily water, heat and generous plant food during recovery.

Eggs and incubation

For the nominate form, specialist breeder records commonly report **6-20 eggs**, with occasional larger clutches. U. o. philbyi is smaller and often produces about **6-10 eggs**. Individual size, age and condition matter; record each egg separately.

Use **30-31.5 C** as a conservative starting range, with roughly **70-95 days** as a planning window. Successful older records used about 30-32 C. Use barely damp medium, prevent droplets from touching eggs and track egg mass, condensation and logger temperature continuously.

Evidence confidence

Topic	Confidence and application
Taxonomy / range	High: peer-reviewed revision and current reptile database
Habitat / adult size	High-moderate: taxonomic database and revision
Enclosure / feeding	Moderate: genus biology plus specialist captive practice
Captive seasonal table	Moderate-low: facility starting points, to be revised from records
Clutch / incubation	Moderate: repeated breeder reports, not controlled trials

Source corrections applied

Jordan was removed from the confirmed core range because the current database treats it only as questionable or possible; Yemen was added for U. o. philbyi. The supplied 55 C peak was retained as part of a broad, escapable surface zone. The enclosure was enlarged, substrate deepened from 10-15 cm to 20-30 cm, and stable cliff-like ledges emphasized. Breeding guidance now distinguishes the smaller philbyi clutch range.

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. Uetz, P., Freed, P., Aguilar, R., Reyes, F., Kudera, J. & Hošek, J. (eds.). The Reptile Database: Uromastyx ornata. Current subspecies, distribution, nomenclature and oviparity; accessed 22 September 2026.

2. Wilms, T.M., Böhme, W., Wagner, P., Lutzmann, N. & Schmitz, A. (2009). On the phylogeny and taxonomy of the genus Uromastyx. Bonner zoologische Beiträge 56:55-99.

3. IUCN Red List. Uromastyx ornata: Least Concern. Conservation category checked 22 September 2026.

4. Jones, T.E. Captive care and breeding of the Ornate Uromastyx (U. o. ornata). Detailed breeding dates, clutch records and successful incubation at 86-89 F; historical specialist record.

5. IUCN/TRAFFIC (2010). CoP15 Prop. 10 analysis: Uromastyx ornata; CITES Appendix II status, range, reproductive and trade review.

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 ornata

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

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.