

Recommended Annual Breeding Schedule

Egernia rugosa - Yakka skink

Habitat basis Open forest, woodland and low shrubland in Queensland, especially Brigalow Belt and Mulga Lands habitats. Colonies use deep burrows and cavities beneath logs, stumps, tussocks, rocks and similar structures.	Climate basis Roma and Charleville records show hot, summer-wet conditions and cool, dry winters. Exposed afternoon humidity is often low, while mornings and deep refuges are appreciably more humid.	Breeding anchor Field births occurred in January-February. Shifted six months for the Netherlands, births are expected mainly in July-August. Spring mating is a working hypothesis, not a published species-specific date.
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Month	Day ambient	Night	Basking surface	UVI at bask	Photoperiod	Heat / UV hours	Feeding	Seasonal management
Jan	16-19 C	10-13 C	28-32 C	1	9 h 30 m	4 h	1 light feed if active	Cool maintenance - healthy adults
Feb	18-21 C	11-14 C	30-34 C	1-2	10 h	5 h	1-2 small feeds	Staged warm-up
Mar	22-25 C	13-16 C	34-37 C	2-3	11 h	7 h	3 feeds weekly	Emergence / courtship watch
Apr	25-28 C	15-18 C	36-40 C	3-4	12 h	9 h	4-5 feeds weekly	Likely mating window
May	27-30 C	17-20 C	38-42 C	3-5	13 h	10 h	5-6 feeds weekly	Mating / early gestation
Jun	28-31 C	19-21 C	40-43 C	4-5	14 h	11 h	5-6 feeds weekly	Gestation
Jul	29-32 C	20-22 C	40-44 C	4-5	14 h	11 h	5-6 feeds weekly	Births may begin
Aug	29-32 C	20-22 C	40-44 C	4-5	13 h 30 m	10-11 h	5-6 feeds weekly	Peak births / recovery
Sep	27-30 C	18-20 C	38-42 C	3-4	12 h 30 m	9 h	4-5 feeds weekly	Late births / recovery
Oct	24-27 C	15-18 C	36-39 C	2-3	11 h 30 m	7 h	3-4 feeds weekly	Autumn transition
Nov	20-23 C	12-15 C	32-36 C	1-2	10 h 30 m	5 h	2 feeds weekly	Taper heat and feeding
Dec	16-19 C	10-13 C	28-32 C	1	9 h 30 m	4 h	1 light feed if active	Cool maintenance - monitor weekly

Humidity: keep exposed surfaces well ventilated and mostly dry, typically around 30-45% RH by day with a normal overnight rise. Provide deep, slightly humid burrows or hides around 50-70% RH, but avoid continuously wet substrate. These are facility starting points inferred from range climate and burrow use; direct burrow microclimate data were not located.

Cooling caution: the wild range spans subhumid to semi-arid Queensland and burrows buffer weather extremes. Do not copy outdoor frost events into captivity. Retain a short daily basking opportunity, feed only animals that warm and digest normally, and reverse the cycle for dehydration, respiratory signs or sustained mass loss.

Practical Husbandry and Social Management

The species is a large, secretive burrow skink. The priorities are stable excavatable refuges, horizontal space, measured gradients and careful management of social compatibility.

Enclosure and group management

A conservative working minimum is approximately **180 x 90 x 90 cm for one adult**. An established compatible pair or family unit needs at least **240 x 120 x 100 cm**, preferably larger, with more than one independent burrow hub, basking site and feeding station.

Field aggregations reached 21 animals, but genetic kinship was not confirmed. This is not evidence that unrelated captive adults can be combined safely. Introduce cautiously and separate for persistent chasing, burrow exclusion, bite wounds, suppressed basking, reduced feeding or declining body mass.

Burrows, substrate and furnishings

Provide roughly **20-30 cm of compactable soil-sand-clay substrate** over a drainage layer where needed. Build accessible burrow chambers beneath anchored logs, stumps, slabs or artificial covers. Every heavy object must rest on the enclosure floor or an independent support so excavation cannot cause collapse.

Use several entrances and tight, body-contact chambers across the thermal gradient. Add visual barriers, leaf litter, coarse woody debris and at least one quiet humid retreat. Keep a shallow, stable bowl of fresh water available and replace it daily.

Basking, light and UVB

During full activity, use a broad surface around **38-44 C**, warm-side air around **27-32 C** and cooler shaded retreats in the low-to-mid 20s. These are conservative facility targets, not published preferred-body-temperature measurements for this species.

A measured **UVI 3-5** at the principal basking position is a practical open-woodland target, with complete shade and burrows below UVI 1. Use a UV meter, independent surface and air probes, and a thermostat; never infer exposure from lamp wattage or distance alone.

Diet and supplementation

Yakka skinks are omnivorous. Field and specialist accounts indicate that juveniles take proportionally more insects, while plant material becomes increasingly important with age. No defensible fixed captive percentage was located, so use condition, stool quality and growth rather than a rigid ratio.

For adults, make varied leafy greens, safe weeds, flowers and seasonal vegetables the regular base, with gut-loaded roaches, crickets, locusts, silkworms, snails and other suitable invertebrates offered once or twice weekly during full activity. Juveniles can receive smaller invertebrate feeds more often. Keep sweet fruit occasional.

Use plain calcium on most growing-season insect feeds and a low-frequency multivitamin according to product strength. Avoid routine high-dose vitamin D3 when measured UVB is effective. Adjust portions to body condition; large Egernia can become obese in captivity.

Period	Feeding management
Dec-Jan	One small feed only if the animal basks and digests normally
Feb-Mar	Increase gradually after normal heat and activity return
Apr-Sep	Adults 4-6 days weekly; juveniles smaller meals more often
October	Reduce portions as heat and photoperiod decline
November	Two small feeds weekly; never feed a cold inactive animal

Winter management

Use gradual autumn reduction rather than abrupt shutdown. A cautious core range around **10-13 C at night and 16-19 C by day**, with a short 28-32 C basking opportunity, preserves choice while providing a clear season. Deeper cooling is not justified without known provenance and experienced veterinary oversight.

Cool only healthy, well-conditioned adults. Weigh weekly with minimal disturbance and record basking, feeding, hydration and faecal output. Juveniles, gravid females and compromised animals should not be forced through the same schedule.

Breeding, Neonates and Evidence Review

The strongest life-history evidence comes from a multi-year population study in Queensland's Mulga Lands. Husbandry values are kept separate from confirmed wild facts.

Reproductive timing and litter

The species is viviparous. In the studied population, parturition occurred in **January-February** and could take several days. Mean litter size was **2.4 young** and mean neonate snout-vent length was **84.5 mm**. Shifted six months, the principal Netherlands target is **July-August**.

Species-specific mating dates were not established in the accessible study. The March-May captive courtship window is therefore a cautious spring hypothesis based on seasonal emergence and the broader Egernia pattern. Record every observed mating, mass change and birth before tightening the schedule.

Growth, longevity and neonates

Six subadult cohorts were identified; animals took **at least five years to reach sexual maturity** and life expectancy exceeded **12 years**. Do not accelerate growth with excessive food or breed by calendar age alone.

Provide neonate-width burrows, several low basking choices and finely divided food. Confirm that every juvenile feeds, basks and gains weight. Young may remain near the natal aggregation in nature, but captive retention is conditional on compatibility and equal access to resources.

Key references

1. Ferguson, D. & Mathieson, M. (2014). Yakka skink, Egernia rugosa: targeted species survey guidelines. Queensland Herbarium. Habitat, burrows, seasonality and distribution. qld.gov.au/.../yakka-skink.pdf
2. Peck, S., Gardner, M.G., Seddon, J.M. & Baxter, G. (2016). Life-history characteristics of the yakka skink, Egernia rugosa, indicate long-term social structure. Australian Journal of Zoology 64:335-343. doi.org/10.1071/ZO16061
3. Bureau of Meteorology. Climate statistics for Charleville Aero (044021) and Roma Airport (043091): long-term monthly temperature, rainfall and humidity normals. Charleville | Roma
4. The Reptile Database. Egernia rugosa De Vis, 1888: accepted name, distribution and viviparity. reptile-database.reptarium.cz/Egernia/rugosa
5. Chapple, D.G. (2003). Ecology, life-history, and behavior in the Australian scincid genus Egernia. Herpetological Monographs 17:145-180. biology-assets.anu.edu.au/hosted_sites/Scott/2003chapplehm.pdf

Important: This is a practical evidence-informed protocol, not a controlled experimental standard. Locality, age, condition, enclosure size and room climate affect the safest settings. Use legally sourced captive-bred animals, thermostatic control, independent thermometers, a UV meter and reptile-veterinary oversight; change all seasonal parameters gradually.

Evidence status of key settings

Point	Evidence and keeper interpretation
Identity and range	Accepted as Egernia rugosa; Queensland endemic in current taxonomic sources, with a broad core range through the Brigalow Belt and eastern Mulga Lands.
Burrow sociality	Groups of up to 21 and multi-season site fidelity support long-term aggregations; kin-based family structure remains a hypothesis pending genetic confirmation.
Births and litter	Species-specific field evidence: January-February, mean 2.4 young, mean neonatal SVL 84.5 mm. Older claims of six young are not used as the expected litter size.
Climate schedule	Derived from Queensland seasonality and Bureau of Meteorology normals, then shifted six months. Burrow temperatures were not measured in the cited climate data.
Basking and UVI	Practical facility starting points. No species-specific preferred-temperature or UV-exposure experiment was located; measure response and retain escape options.
Enclosure size and diet frequency	Conservative management recommendations, not controlled biological thresholds. Scale upward for groups and revise from individual condition and behaviour.

UVI beneath the optional T5 tube

Egernia rugosa

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	1
February	1-2
March	2-3
April	3-4
May	3-5
June	4-5
July	4-5
August	4-5
September	3-4
October	2-3
November	1-2
December	1

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](#).