

Recommended Annual Husbandry Schedule

Egernia stokesii stokesii - Houtman Abrolhos spiny-tailed skink | Northern Hemisphere facility cycle

Identity and range

Egernia stokesii stokesii (Gray, 1845), the Houtman Abrolhos spiny-tailed skink. The accepted island taxon is restricted to the Houtman Abrolhos; Western Australian Museum surveys document it on Pigeon Island in the Wallabi Group. This is the nominate subspecies and should not be managed as mainland *E. s. badia*.

Climate and habitat

Low, wind-exposed offshore islands with limestone/rock crevices, sparse shrub/forb cover and a strongly maritime climate. North Island station 008290 averages 28.5 C / 22.0 C in February and 21.2 C / 15.3 C in July. Rain peaks in winter; annual mean is about 277 mm. Crevices, shade and air movement are central.

Diet and reproduction

Species-level studies describe an omnivore with seasonal and age-related diet shifts: adults take more plant material, juveniles proportionally more arthropods. Viviparous; litter size varies widely across *E. stokesii*. Eastern populations commonly give birth in late summer. Exact Abrolhos reproductive timing is not well published, so the calendar below is a cautious locality-climate translation.

Month	Day ambient	Night	Basking surface	UVI*	Photoperiod	Spray / water	Adult food offers*	Seasonal management
Jan	19-22 C	14-16 C	35-37 C	1-2	10.5 h	Light spray 2-3x/wk; strong air	0-1 if active	Cool/wet winter slowdown
Feb	20-23 C	14-17 C	36-38 C	1-2	11 h	Light spray 1-2x/wk	1-2	Late winter; gradual warm-up
Mar	21-24 C	15-17 C	38-40 C	2	12 h	Light spray weekly	2-3	Spring activation
Apr	22-25 C	16-18 C	39-41 C	2-3	12.5 h	Minimal local spray	3-4	Courtship / introductions
May	23-27 C	17-19 C	40-42 C	3	13.5 h	Mostly dry; water always	4	Mating / early gestation
Jun	24-28 C	18-21 C	41-43 C	3-4	14 h	Dry; water always	4-5	Gestation
Jul	25-29 C	19-22 C	41-43 C	3-4	13.5 h	Dry; water always	4-5	Peak summer activity
Aug	25-30 C	20-22 C	41-43 C	3-4	13 h	Dry; water always	4-5	Late gestation / births possible
Sep	24-29 C	19-22 C	40-42 C	3	12 h	Minimal local spray	4	Main birth / recovery window
Oct	23-27 C	18-21 C	39-41 C	2-3	11.5 h	Light spray weekly	3	Post-partum / autumn taper
Nov	21-25 C	16-19 C	37-39 C	2	10.5 h	Light spray 1-2x/wk	2-3	Cool-down begins
Dec	19-23 C	15-17 C	35-37 C	1-2	10 h	Light spray 2-3x/wk; air	0-1 if active	Mild cool/wet winter phase

Climate translation: the native Abrolhos cycle is shifted by six months for northern operation. The island winter is mild rather than cold: July mean maximum/minimum at North Island is 21.2/15.3 C, so this protocol uses a cool-season slowdown, **not deep brumation**. Always maintain a retreat warmer than the coldest room air and offer short basking access.

Rainfall translation: Abrolhos winter is the wet season. Captive spray is therefore increased during the northern winter phase, but exposed surfaces must dry rapidly. The wild islands are extremely windy; ventilation is more important than chasing high enclosure humidity.

* UVI, basking surface and food frequency are conservative facility starting points, not published Abrolhos-specific dose or feeding requirements. Measure UVI at the animal, verify basking surfaces with an IR thermometer, and adjust feeding to activity, body condition and reproductive state.

Practical Husbandry and Daily Management

A maritime, crevice-dwelling social skink: stable rockwork, strong ventilation and behavioural choice are central.

Enclosure and rockwork

For a compatible adult pair or established family group, **150 x 70 x 70 cm** is a practical facility starting point, not a research-derived minimum; **180 x 80 x 80 cm or larger** is preferable. Build several independent limestone-like crevice systems, each supported from the enclosure base. Never balance heavy rock on loose substrate. Provide basking shelves immediately beside narrow refuges, plus shaded crevices that remain substantially cooler.

Heat, light and UVB

Treat the basking values in the table as **surface targets**, not air temperature. The animal must be able to retreat within seconds from a hot basking shelf into a cooler crevice. Provide bright visible light and measured UVB. A basking UVI around 3-4 in the active season is a cautious starting point; maintain complete shade and low-UVI crevices because no Abrolhos-specific UV dose study was located.

Water, rainfall and air quality

Keep fresh shallow water available year-round. The native climate is maritime and seasonally humid, but the islands are wind-exposed. Reproduce this with **excellent air exchange** and local, short-lived wetting rather than a generally damp enclosure. Increase light spray in the winter-rain phase, then allow rock and substrate surfaces to dry fully between events. Avoid chronically wet crevices.

Diet and feeding

Base the adult diet on fibrous leafy greens, edible weeds, flowers and small amounts of fruit, with appropriately sized invertebrates offered seasonally. Species-level work shows adults shift toward more plant matter while juveniles take proportionally more arthropods. Rotate plant species rather than relying on a single salad. Calcium/mineral supplementation should be matched to measured UVB, diet composition and breeding status.

Social management and handling

Wild *E. stokesii* can form long-lived kin groups and share refuge crevices, but captive compatibility must be assessed rather than assumed. Use multiple basking sites, feeding stations and refuge networks. Avoid adding unfamiliar adults directly to an established group. Separate immediately for sustained pursuit, refuge exclusion, repeated biting, suppressed basking, weight loss or feeding suppression. One adult male per social unit is the safest starting point unless a known stable group proves otherwise.

Daily keeper checks

Check	Record
Activity	Emergence, basking duration, crevice choice, locomotion
Feeding	Plant mix, prey, intake, water, faeces
Condition	Mass trend, eyes, jaw, skin, toes, abdomen, wounds
Environment	Basking surface, air gradient, UVI, refuge temperature, ventilation

Veterinary triggers

Seek reptile-veterinary assessment for persistent weight loss, abnormal respiration, jaw or limb swelling, repeated regurgitation, wounds, failure to bask after warm-up, continuing activity during intended cooling despite correct temperatures, or a gravid female whose condition declines. Quarantine and faecal screening are prudent for all new animals.

Breeding, Viviparity and Evidence Review

The reproductive calendar below is evidence-informed, but exact Houtman Abrolhos mating and birth timing remains incompletely published.

Seasonal breeding management

Use the mild cool/wet phase to create a real seasonal contrast without deep chilling. From late February into March, increase day length, basking surface and feeding gradually. Courtship and mating are most plausibly expected in spring after warm-up. Do not force pairing; introduce through visual/olfactory contact first and ensure each animal has independent heat, feeding and refuge access.

Gestation and maternal care

Provide gravid females unrestricted access to the full thermal gradient, abundant calcium-rich plant food and multiple secure crevices. Avoid unnecessary handling and social disruption. Track mass and abdominal contour and use reptile-veterinary ultrasound where useful. If a male interferes with basking or feeding, separate him before late gestation.

Births and neonates

Across *E. stokesii*, females are viviparous and litter size varies; eastern populations commonly give birth in February-March. A six-month northern translation therefore places the expected birth window mainly in **August-September**, but the Abrolhos population itself is not well documented enough to treat this as a fixed rule. Record birth date, litter size, neonatal mass/length and maternal recovery. House neonates with secure narrow crevices and monitor adult behaviour closely because infanticide has been reported in the species.

Evidence confidence

Topic	Confidence and application
Identity / range	High - AFD/ALA accepted taxon; WA Museum records Pigeon Island.
Abrolhos climate	High - BOM North Island station 008290; long-term monthly climate.
Habitat / activity	Moderate-high - island observations plus closely related Baudin form; crevice ecology is consistent.
Sociality / diet	High at species level - direct studies; Abrolhos-specific detail remains limited.
Breeding calendar	Moderate-low - viviparity/litter biology strong; locality timing is sparsely published.
Thermal / UV / size	Moderate-low - cautious captive starting points, not experimental island values.

How the native climate was translated

North Island climate at 28.30 S was shifted by six months for northern operation. Native July is the coldest month (21.2 C mean maximum; 15.3 C mean minimum) and also one of the wettest (68.7 mm). Native February is warmest (28.5 C mean maximum; 22.0 C mean minimum). This is why the keeper programme keeps winter mild, maintains some basking opportunity, and moves more spray to the cool season rather than the summer.

Key references

1. Australian Bureau of Meteorology. Climate statistics for North Island, station 008290 (Houtman Abrolhos): monthly maximum/minimum temperature, rainfall, humidity and wind.
2. Atlas of Living Australia / Australian Faunal Directory. *Egernia stokesii stokesii* (Gray, 1845), Houtman Abrolhos Spiny-Tailed Skink.
3. Western Australian Museum. Wildlife of the Houtman Abrolhos: documented *E. stokesii stokesii* on Pigeon Island.
4. Australian Government. Survey guidelines for Australia's threatened reptiles: limestone-crevice ecology and activity guidance for the closely related Baudin Island form of *E. stokesii*.
5. Duffield, G.A. & Bull, C.M. 1998. Seasonal and ontogenetic changes in the diet of the Australian skink *Egernia stokesii*. *Herpetologica* 54:414-419.
6. Duffield, G.A. & Bull, C.M. 2002. Stable social aggregations in an Australian lizard, *Egernia stokesii*. *Naturwissenschaften* 89:424-427.
7. Duffield, G.A. & Bull, C.M. 1996. Characteristics of the litter of the gidgee skink, *Egernia stokesii*. *Wildlife Research* 23:337-342.
8. Knauf, S. 2007. Care and captive breeding of the Gidgee Skink *Egernia stokesii stokesii*. *Reptilia* (GB) 51:61-69.

UVI beneath the optional T5 tube

Egernia stokesii stokesii

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

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](#).