Cyclura rileyi rileyi

San Salvador Rock Iguana / Watling Island Ground Iguana

Species-specific annual husbandry and breeding protocol for the San Salvador subspecies, anchored to field work on Green Cay, the IUCN West Indian Iguana Husbandry Manual, and current Cyclura conservation guidance.

Core profile	**Breeding anchor**	**Nest / clutch evidence**	**Incubation caution**
Small Critically Endangered Bahamian rock iguana restricted to San Salvador and satellite cays. Terrestrial, heliothermic, strongly herbivorous and adapted to exposed coastal scrub and limestone cay habitats.	Mating mainly May-June. Field work on Green Cay found nesting concentrated in July, with larger females tending to lay earlier in the month.	Sandy-soil burrows 30-116 cm long; egg chambers 18-28 cm deep. Up to 6 eggs, average 4.4. Eggs average about 53 x 30 mm and 27.7 g.	Natural incubation lasts about 91-92 days, but a species-specific incubation temperature has not been established. Any artificial temperature range is therefore an extrapolation.

Annual keeper schedule

Month	Day air	Night	Bask	UVI*	Light	RH day/night*	Rain / mist	Food d/wk	Seasonal management
January	25-27 C	20-22 C	41-45 C	4-6	10.8 h	55-68 / 70-82%	Drier; light AM mist 2-3x/wk	5	Cooler dry-season maintenance; keep adults lean
February	25-27 C	20-22 C	41-45 C	4-6	11.3 h	54-67 / 70-82%	Drier; light mist	5	Dry-season conditioning; maximize browse variety
March	26-28 C	21-23 C	42-46 C	4-6	12.0 h	54-68 / 70-82%	Driest phase; localized refuge moisture	5	Seasonal warm-up; no brumation
April	27-29 C	22-24 C	42-46 C	4-6	12.7 h	56-70 / 72-84%	Dry-to-wet transition	5-6	Increase feeding quality; prepare nesting substrate
May	28-30 C	23-25 C	43-47 C	4-6	13.2 h	60-74 / 74-86%	Increase rain pulses	6	Primary courtship/mating begins
June	29-31 C	24-26 C	43-47 C	4-6	13.5 h	62-76 / 76-88%	Warm; regular rain pulses	6-7	Peak mating; gravid females need privacy
July	29-31 C	24-26 C	43-47 C	4-6	13.3 h	60-75 / 75-87%	Warm; moderate rain	6-7	Primary oviposition month; inspect nest zone daily
August	29-31 C	24-26 C	43-47 C	4-6	12.9 h	60-76 / 75-88%	Warm; intermittent rain	6	Incubation / female recovery
September	29-31 C	24-26 C	42-46 C	4-6	12.2 h	62-78 / 76-90%	Wet/storm season increases	6	Late incubation; stable moisture, avoid overheating
October	28-30 C	23-25 C	42-46 C	4-6	11.6 h	64-80 / 78-90%	Wettest/storm phase	6	Expected hatching/emergence from July clutches
November	27-29 C	22-24 C	41-45 C	4-6	11.1 h	60-74 / 74-86%	Rainfall easing	5-6	Juvenile growth; transition toward dry phase
December	26-28 C	21-23 C	41-45 C	4-6	10.7 h	56-70 / 72-84%	Drier transition	5	Seasonal reset; reduce rain, not drinking water

* UVI and RH values are practical operational targets rather than experimentally determined C. r. rileyi thresholds. There is no cold brumation. Use seasonal changes in heat, day length and rainfall as gentle cues rather than abrupt cooling.

Housing, climate and nutrition

Taxonomy and status

Cyclura rileyi rileyi is the nominate San Salvador subspecies of C. rileyi. The current Reptile Database retains three subspecies: rileyi, cristata and nuchalis. The IUCN SSC Iguana Specialist Group lists the San Salvador Rock Iguana as Critically Endangered; Cyclura rileyi is CITES Appendix I.

Natural habitat

Surviving populations occur on small offshore cays and islets around San Salvador, The Bahamas. Habitat is exposed, windy and strongly maritime, with limestone, sandy pockets, coastal scrub, low vegetation and limited fresh water. Deep cracks, burrows and vegetation provide thermal and humidity refuges.

Seasonality

San Salvador is warm year-round. The coolest/driest period is broadly winter to early spring; rainfall increases in late spring and again strongly during the late-summer/autumn storm season. Do not copy outdoor ambient temperatures literally indoors: provide strong local heat with broad thermal choice.

Enclosure

Use a large terrestrial enclosure with extensive floor area, broad sun-like basking platforms, heavy rockwork, deep hides and visual barriers. Provide deep compactable sand/soil year-round, with the breeding nest zone made substantially deeper and warmer before May.

Heat and UVB

Use a broad basking-surface target around 41-47 C seasonally with cooler shaded retreats. UVI 4-6 at the principal basking zone is a conservative high-UV operational target for open-habitat Cyclura; provide immediate access to zero-UV shade.

Humidity and ventilation

These are xeric-looking animals from humid maritime cays. Keep strong ventilation and let exposed surfaces dry, while maintaining buffered humidity in hides and deeper substrate. Avoid both chronic wetness and chronically desiccating indoor air.

Diet

Field work shows a strongly plant-dominant diet. Green Cay iguanas frequently consume coastal plants including Borrichia arborescens, Rhachicallis americana and Opuntia stricta. In captivity, prioritize calcium-rich leafy weeds, browse, flowers and fibrous vegetables, with modest fruit and cactus pads/fruit where suitable.

Animal matter

Occasional animal material has been documented, including insects and crab predation, but this is opportunistic. Do not make animal protein a routine adult food. Juvenile invertebrate intake should remain small and should never replace a plant-dominant diet.

Feeding management

Small-island Cyclura can become obese quickly in captivity. Use fibrous bulk rather than calorie-dense fruit, monitor body condition and seasonal weight, and reduce intake during the drier/cooler maintenance phase without restricting water.

Water

Provide clean drinking water continuously. Mist/rain events can stimulate drinking, but the floor should not remain saturated. Clean bowls and wet areas frequently because warm Cyclura enclosures can support rapid bacterial growth.

Social management

Adults can be territorial, particularly around courtship and nesting. Large enclosures, multiple feeding/basking sites and visual barriers are essential. Separate promptly for sustained chasing, biting, food/heat exclusion or weight loss.

Breeding, nesting and incubation

Sexual maturity

The IUCN husbandry manual reports females sexually mature at about 21.5 cm SVL and 340 g. Maturity should still be judged by age, skeletal development, body condition and breeding history rather than size alone.

Courtship and mating

Primary mating is in May and June. Increase seasonal rainfall and feeding quality gradually in spring, while maintaining intense basking and UV. Expect increased display and male territoriality; females must have routes to avoid persistent males.

Oviposition timing

Green Cay field work found nesting during July, with larger females generally laying earlier in the month than smaller females. Prepare the nest area well before May so gravid females can investigate it without late disturbance.

Nest design

Natural nests are dug in sandy soil. Reported burrows measure about 30-116 cm long, with egg chambers 18-28 cm below the surface. Provide at least 40-60 cm of compactable sand/soil where possible, with a warm, slightly moist lower gradient and enough horizontal room to tunnel.

Clutch and egg data

The husbandry manual reports up to 6 eggs with an average of 4.4. Mean egg size is about 53.4 x 29.5 mm and mean egg mass about 27.7 g. Record each female, pre-lay/post-lay mass, clutch size, egg mass and shell condition.

Incubation - evidence limit

Natural incubation duration is about 91-92 days, but the species-specific incubation temperature is listed as unknown. Do not present any single artificial temperature as proven for this subspecies.

Incubation - practical starting point

If artificial incubation is required, a conservative 29.5-31.0 C working range may be used as an extrapolation from related Cyclura, with careful moisture control and continuous temperature logging. Avoid sustained temperatures above 31 C until lineage-specific experience supports them. Keep eggs in a stable humid microclimate without free water contacting the shell; periodic box weights are safer than repeated heavy re-wetting.

Hatching

July clutches should generally hatch around October if the natural 91-92 day duration is followed. Hatchlings in the husbandry manual average about 21.5 g. Provide secure shallow hides, strong but safe UVB, appropriately scaled basking areas and frequent plant foods from the start.

Female recovery and health

Post-lay females should receive privacy, water, high-calcium browse and normal basking. Monitor for retained eggs if digging persists, appetite fails to recover or abdominal contour remains abnormal. Key preventable risks include metabolic bone disease, burns, obesity, dehydration, substrate impaction and social trauma; weigh animals regularly and keep breeding-season logs.

Conservation, evidence and keeper interpretation

This is a Critically Endangered subspecies with highly fragmented populations: preserve exact pedigree/locality records and avoid unrecorded hybridization with C. r. cristata or C. r. nuchalis. Primary anchors are the IUCN West Indian Iguana Husbandry Manual, Samuel Cyril Jr. 2001 Green Cay thesis, Hayes et al. conservation studies, current Reptile Database taxonomy and IUCN SSC status listings. Facility observations can refine rainfall, feeding and mating cues, but July nesting and the 91-92 day natural incubation period should carry more weight than generic Cyclura calendars.

UVI beneath the optional T5 tube

Cyclura rileyi rileyi

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

Refine numerical target
Replace the blanket UVI 5-7 default with an optional adult T5 patch at UVI 4-6, aiming initially around 5. This is a moderate working choice within published exposure guidance, not proof that 5-7 is harmful or a measured optimum for every Cyclura. Published UV-Tool assignments vary even within the genus; no trial was found that makes UVI 7 a necessary default.

Evidence level: Inferred genus-level working range. 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.