

REPTILE LEGENDS - KEEPER PROTOCOL

Evidence-informed annual schedule - adjust to provenance, body condition, age and veterinary findings

Cyclura rileyi cristata

White Cay Rock Iguana / Sandy Cay Rock Iguana

Species-specific husbandry protocol for the White (= Sandy) Cay subspecies. Published reproductive data are sparse, so proven facts are separated from conservative management extrapolations based on related *Cyclura rileyi* populations and southern Bahamian climate.

Core profile Critically Endangered Bahamian rock iguana known naturally from White (= Sandy) Cay in the southern Exumas. Small for a <i>Cyclura</i> (reported to about 28 cm SVL), terrestrial, heliothermic and primarily herbivorous.	Breeding anchor Direct cristata data are lacking. The IUCN husbandry manual suggests mating probably May-June and oviposition probably June-July; treat these dates as provisional.	Nest / clutch evidence Cristata-specific nest dimensions and clutch size remain undocumented in the husbandry manual. Provide a deep, broad, compactable sand/soil nesting zone and record every captive nest in detail.	Incubation evidence Cristata-specific incubation temperature and duration are unknown. A 29.5-30.5 C working range may be used only as a conservative extrapolation from related <i>Cyclura</i> , with meticulous records.
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Annual keeper schedule

Month	Day air	Night	Bask	UVI*	Light	RH day/night*	Rain / mist	Food d/wk	Seasonal management
January	25-27 C	21-23 C	41-45 C	4-6	10.9 h	58-70 / 72-82%	Dry-season maintenance; light AM mist	5-3x/wk	Cooler, drier phase; keep adults lean
February	25-27 C	21-23 C	41-45 C	4-6	11.4 h	57-69 / 72-82%	Dry; localized moist refuge only	5	Dry-season conditioning; broad browse variety
March	25-28 C	21-23 C	42-46 C	4-6	12.0 h	56-69 / 72-82%	Driest period; avoid chronic enclosure wetness	6	Seasonal warm-up; no brumation
April	26-29 C	22-24 C	42-46 C	4-6	12.7 h	58-72 / 74-84%	Dry-to-wet transition	5-6	Increase feeding quality; prepare nest zone
May	27-30 C	23-25 C	43-47 C	4-6	13.2 h	62-76 / 76-86%	Rain pulses increase	6	Probable courtship/mating - evidence indirect
June	28-31 C	24-26 C	43-47 C	4-6	13.5 h	64-78 / 78-88%	Warm; regular rain pulses	6-7	Probable mating / gravid period
July	29-31 C	24-26 C	43-47 C	4-6	13.3 h	65-80 / 78-89%	Warm wet season; moderate rain	6-7	Probable oviposition window; monitor digging
August	29-31 C	24-26 C	43-47 C	4-6	12.9 h	66-80 / 79-90%	Wet/storm season	6	Female recovery / possible incubation
September	29-31 C	24-26 C	42-46 C	4-6	12.2 h	66-81 / 79-90%	Wet/storm season	6	Possible late incubation; maintain stable moisture
October	28-30 C	23-25 C	42-46 C	4-6	11.7 h	65-80 / 78-89%	Peak rainfall / storms	6	Possible hatch period by <i>C. rileyi</i> analogy
November	27-29 C	22-24 C	41-45 C	4-6	11.1 h	62-76 / 75-86%	Rainfall easing	5-6	Juvenile growth; transition toward dry phase
December	26-28 C	21-23 C	41-45 C	4-6	10.8 h	59-72 / 73-84%	Drier transition	5	Seasonal reset; reduce rain, not drinking water

* UVI, RH and monthly climate values are practical operational targets, not experimentally determined thresholds for *C. r. cristata*. White/Sandy Cay is warm, maritime and seasonally dry; do not use cold brumation.

Housing, climate and nutrition

Taxonomy and status

Cyclura rileyi cristata is the White Cay (Sandy Cay) Rock Iguana. The current Reptile Database retains *C. rileyi* with three subspecies: *rileyi*, *cristata* and *nuchalis*. The IUCN SSC Iguana Specialist Group lists the White Cay form as Critically Endangered; *Cyclura rileyi* is CITES Appendix I.

Range and habitat

Known naturally from White (= Sandy) Cay in the extreme southern Exumas, The Bahamas. The habitat is exposed, low, maritime scrub on limestone with intense sun, salt influence and seasonally dry conditions.

Seasonality

Use a southern Bahamian wet-dry rhythm rather than brumation: a drier winter and early spring, increasing rain from late spring, then a warmer wetter and storm-prone late-summer/autumn period. Exact microclimate on White Cay should override generic regional values when available.

Enclosure

Provide a large terrestrial enclosure with broad floor area, heavy limestone-like rockwork, multiple deep retreats, strong visual barriers and extensive sun-like basking. Include a large compactable sand/soil nest zone before late spring even though natural *cristata* nest dimensions remain undocumented.

Heat and UVB

Provide a broad basking surface around 41-47 C seasonally while retaining cooler shaded retreats. UVI 4-6 at the principal basking zone is a conservative open-habitat *Cyclura* working target; animals must be able to leave UV instantly.

Humidity and ventilation

The cay looks xeric but is maritime. Use strong ventilation and let exposed surfaces dry between rain events while keeping deeper substrate and retreats buffered from severe desiccation. Avoid chronically wet substrate.

Diet

The IUCN husbandry manual describes *C. r. cristata* as primarily herbivorous. Feed calcium-rich leafy weeds, browse, flowers, fibrous vegetables, cactus pads and limited seasonal fruit. Do not make routine animal protein a major adult food source.

Social management

Adults can become territorial around seasonal reproductive activity. Provide multiple basking and feeding stations, large sight breaks and enough floor area for avoidance. Separate animals for persistent biting, chasing, resource exclusion or declining body mass.

Monitoring

Weigh adults monthly and increase monitoring during the probable May-July reproductive window. Record appetite, feces, shedding, basking, courtship, digging and body mass so captive data can fill genuine gaps in the published natural history.

Breeding, nesting and incubation

Sexual maturity

The IUCN husbandry manual lists size/age at sexual maturity for cristata as unknown. Do not infer readiness from calendar age alone; use adult body size, skeletal maturity, body condition and prior history.

Courtship and mating

Direct data for cristata are lacking. The IUCN manual suggests mating probably occurs in May-June, matching the broader *C. rileyi* pattern. Increase rainfall and feeding quality gradually from spring while maintaining intense basking and UV.

Nesting timing

The IUCN manual suggests oviposition probably June-July, but this has not been confirmed with the detailed field studies available for *rileyi* and *nuchalis*. Treat repeated digging in this window as significant and log dates carefully.

Nest provision

Cristata-specific natural nest dimensions are unknown. As a conservative captive provision, offer at least 40-60 cm depth of compactable sand/soil and generous horizontal space for tunneling, with warmth, privacy and a moisture gradient. This is a management provision, not a measured wild-nest specification.

Clutch data

Published husbandry summaries list the number of eggs, egg size and hatchling size for cristata as unknown. Do not copy clutch expectations from *nuchalis* or nominate *rileyi*; record each captive clutch as valuable taxon-specific information.

Incubation

The IUCN manual lists cristata-specific incubation temperature and duration as unknown. If artificial incubation is necessary, 29.5-30.5 C is a conservative working range extrapolated from related *Cyclura* - not a validated cristata optimum. Avoid prolonged temperatures above about 31 C unless lineage data support them.

Expected duration

Related *C. rileyi* populations commonly hatch roughly 85-92 days after laying, often in late September to mid-October. Use that only as a monitoring window, not as a cristata-specific prediction; viable eggs may differ.

Incubator management

Prioritize temperature stability, oxygen exchange and a humid but not waterlogged incubation microclimate. Prevent free water from touching eggs. Monitor container mass and egg appearance rather than making large reactive water additions.

Female recovery / hatchlings

Post-lay females need privacy, water, calcium-rich browse and normal basking. Seek veterinary assessment for persistent digging with lethargy, anorexia or abdominal fullness. Hatchlings need secure hides, scaled basking sites, UVB and plant foods immediately.

Conservation and records

Maintain exact pedigree and locality records and keep cristata genetically separate from *C. r. rileyi* and *C. r. nuchalis*. Because published reproductive information is sparse, detailed captive records of courtship, laying dates, clutch size, egg mass, incubation conditions and hatchling outcomes are especially valuable.

UVI beneath the optional T5 tube

Cyclura rileyi cristata

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](#).