

Cyclura cornuta

Hispaniolan Rhinoceros Iguana / Rhinoceros Rock Iguana

Species-specific annual husbandry and breeding protocol for the Hispaniolan rhinoceros iguana, anchored to the IUCN West Indian Iguana Husbandry Manual, Hispaniolan field studies and current Cyclura conservation literature.

Core profile Large Endangered rock iguana native to Hispaniola and nearby islands. Primarily herbivorous, heliothermic, terrestrial and strongly associated with dry forest, scrub and rocky limestone habitats.	Thermal target Provide intense local basking with extensive cooler retreats. Basking values below are surface temperatures; they are not whole-enclosure air or target body temperatures.	Breeding anchor Classic husbandry data: mating in May, oviposition in June, about 85 days incubation. Southwestern DR field populations can shift nesting to Sep-Oct.	Nest / clutch evidence Soil/sand burrow about 1 m long with terminal chamber. Up to 34 eggs reported; husbandry manual average 17.4. Working incubation anchor: ~31 C / ~85 days.
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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	26-28 C	21-23 C	42-46 C	4-6	11.0 h	52-65 / 68-80%	Drier phase; light AM mist 2-3x/wk	5	Dry-season maintenance; lean body condition
February	26-29 C	21-23 C	42-46 C	4-6	11.5 h	52-66 / 68-80%	Drier phase; light AM mist	5	Condition adults; increase browse diversity
March	27-30 C	22-24 C	43-47 C	4-6	12.0 h	55-68 / 70-82%	Dry-to-wet transition	5-6	Warm-up; territorial activity may increase
April	28-31 C	23-25 C	44-48 C	4-6	12.5 h	58-72 / 72-84%	Rain pulses increase	6	Courtship conditioning; nest zone ready
May	29-32 C	24-26 C	44-48 C	4-6	13.0 h	62-76 / 75-87%	Wet-season onset / regular rain pulses	6-7	Primary mating month in classic Hispaniolan data
June	29-32 C	25-27 C	44-48 C	4-6	13.2 h	64-78 / 76-88%	Wet; regular rain	6-7	Primary oviposition month; monitor gravid females
July	29-32 C	25-27 C	44-48 C	4-6	13.0 h	64-80 / 78-90%	Warm wet phase	6-7	Incubation / female recovery
August	29-32 C	25-27 C	44-48 C	4-6	12.7 h	64-80 / 78-90%	Warm wet phase	6-7	Incubation; maintain stable nest moisture
September	29-31 C	25-27 C	43-47 C	4-6	12.2 h	66-82 / 80-92%	Wet / storm season	6-7	Hatching in classic cycle; some SW populations begin nesting
October	28-31 C	24-26 C	43-47 C	4-6	11.7 h	64-80 / 78-90%	Wet phase easing	6	Hatchling growth; SW nesting may continue
November	27-30 C	23-25 C	42-46 C	4-6	11.2 h	58-72 / 72-84%	Rain reduces	5-6	Transition toward drier season
December	26-29 C	22-24 C	42-46 C	4-6	10.9 h	54-68 / 70-82%	Drier phase	5	Seasonal reset; no brumation

* UVI and RH values are practical operational targets, not experimentally determined C. cornuta thresholds. No cold brumation. Reproductive timing varies geographically across Hispaniola; exact provenance should override the generic calendar.

Housing, climate and nutrition

Taxonomy and status

The Reptile Database recognizes *Cyclura cornuta* as the Hispaniolan rhinoceros iguana; the Mona population is now treated separately as *Cyclura stejnegeri*. The IUCN SSC Iguana Specialist Group lists *C. cornuta* as Endangered and CITES Appendix I. Preserve locality and pedigree records.

Natural habitat

Most abundant in tropical dry and moist lowland forest and shrubland, especially xeric rocky limestone terraces and coastal lowlands. Retreats include caves, rock crevices, soil/sand burrows and tree hollows. Exposed rocks and trees provide basking sites.

Enclosure

Large terrestrial enclosure with extensive floor area, broad elevated basking slabs, heavy rockwork, deep hides and visual barriers. Provide multiple feeding/basking stations and a diggable soil-sand area year-round. Support all heavy stonework from the enclosure base.

Heat and UVB

Use a broad 42-48 C basking-surface zone in peak season with warm air but substantial shaded retreat space. UVI 4-6 is a conservative high-UV operational target based on open-habitat *Cyclura* husbandry; provide immediate access to zero-UV shade.

Humidity and rainfall

Model a drier cool-season phase and wetter warm-season phase, but do not equate xeric habitat with chronic dehydration. Let exposed surfaces dry between rain pulses while retaining buffered humidity in deep retreats and nest substrate.

Diet

Primarily herbivorous. Feed calcium-rich leafy greens, weeds, edible browse, flowers, fibrous vegetables and modest seasonal fruit. Hispaniolan scat studies show strong plant use, including cactus fruit. Animal matter is opportunistic rather than a routine adult requirement.

Feeding management

Keep adults lean. Offer bulky fibrous plant material more often than calorie-dense fruit. Use feeding platforms or dishes to reduce substrate ingestion. Juveniles may accept more invertebrates in nature, but captive growth should still be built around a plant-dominant diet.

Water

Provide fresh drinking water at all times. Individuals may drink more after rain or misting. Maintain hygiene around water bowls and wet refuge areas; avoid constantly saturated enclosure floors.

Social management

Adults, especially males, can be strongly territorial. Pair/group housing requires very large space, visual barriers and multiple resources. Separate immediately for sustained chasing, biting, exclusion from heat/food, or chronic hiding.

Seasonal interpretation

A May-June breeding cycle is the best general captive starting point. However, southwest Dominican Republic field work documented *C. cornuta* concentrating nesting activity around mid-September to mid-October. Unknown-locality animals should be monitored behaviorally rather than forced to a rigid month.

Breeding, nesting and evidence notes

Courtship and mating

Classic Hispaniolan husbandry records place mating in May, often around the onset of the first rains. Expect increased territoriality, display and male aggression. Ensure females can avoid males and maintain body condition before pairing.

Nesting

The IUCN husbandry manual describes a soil nest tunnel approximately 1 m long, ending in a chamber just large enough for the female to turn around. Provide at least 60-90 cm of deep compactable sand/soil, more if enclosure geometry allows, with a warm moist gradient.

Clutch size

The husbandry manual reports up to 34 eggs, averaging 17.4. Other summaries report 2-25 eggs with means around the mid-teens. Larger, older females generally produce larger clutches. Track pre-lay mass, oviposition mass and individual egg mass.

Incubation

A strong husbandry anchor is approximately 31 C for about 85 days. Avoid treating 31 C as an inflexible single optimum: provide stable moisture, prevent overheating, record actual container temperature and water balance, and consider a small diel fluctuation if your incubator allows controlled variation.

Female recovery

After laying, rehydrate aggressively but safely, restore mineral intake and offer high-quality browse. Some females guard nest areas for several days; provide privacy and separate cage mates if post-lay defense becomes intense.

Hatching season

Under the classic June-laying cycle, hatching falls around September. In some field populations with Sep-Oct nesting, emergence will shift later. Hatchling schedules should therefore follow actual laying dates, not calendar expectations.

Health priorities

Common preventable risks include obesity, metabolic bone disease from UV/calcium imbalance, burns from small intense heat spots, dehydration, retained eggs from poor nesting conditions, and trauma from social aggression. Weigh adults regularly and log seasonal trends.

Diet evidence

Pasachnik & Martin-Velez (2017) used scat analysis in southwestern Dominican Republic and confirmed broad plant use in *C. cornuta*, including cactus fruit. The IUCN husbandry manual describes the species as primarily herbivorous with only occasional animal matter such as caterpillars and pupae.

Evidence anchors

Primary references: West Indian Iguana Husbandry Manual (IUCN SSC Iguana Specialist Group); Pasachnik & Martin-Velez 2017 diet study; Rupp et al. Hispaniolan nesting observations summarized in later conservation literature; current Reptile Database taxonomy and IUCN SSC assessment.

Keeper interpretation

This schedule is a conservative default for *C. cornuta* of unknown Hispaniolan provenance. If your animals have documented locality, known historical breeding dates, or long-term facility data, use those records to shift rainfall and reproductive cues rather than forcing the generic May-June timetable.

UVI beneath the optional T5 tube

Cyclura cornuta

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](#).