

Recommended Annual Husbandry Schedule

Ctenosaura bakeri - Utila spiny-tailed iguana

Identity and habitat

A Critically Endangered iguana endemic to Utila Island, Honduras. Adults are highly associated with humid mangrove forest, especially hollow branches and trunks, while gravid females leave the mangroves to nest in warmer sandy coastal habitat.

Climate and humidity

Utila is warm and humid year-round. Long-term island climate summaries place average RH mostly around 76-83%, with substantial rainfall in every month and a pronounced wetter period in October-January. Captive husbandry should therefore be humid but strongly ventilated, not stagnant or continuously wet.

Reproduction and diet

Nesting is recorded from February-August, usually 11-16 eggs, with some females double-clutching. Incubation is about 85 days and hatching can occur April-October. Adults mainly eat mangrove leaves, flowers and other plant matter, but also crabs, arthropods and occasional vertebrate prey.

MONTH	DAY AMBIENT	NIGHT	BASKING	UVI*	PHOTO	RH DAY / NIGHT*	SPRAY / RAIN	FOOD*	STATUS / BREEDING
January	25-28 C	21-23 C	38-40 C	3	11 h 15 m	70-80 / 80-90%	Light rain/mist 3-4x/wk	4	Courtship / mating
February	25-28 C	21-23 C	38-40 C	3	11 h 35 m	70-80 / 80-90%	Light rain/mist 3-4x/wk	4	Mating / early nesting
March	26-29 C	22-24 C	39-41 C	3-4	12 h	68-78 / 78-88%	Rain/mist 3-4x/wk	4	Gravid / nesting
April	27-30 C	22-24 C	39-41 C	3-4	12 h 25 m	68-78 / 78-88%	Rain/mist 3-4x/wk	4-5	Nesting / first hatching
May	28-30 C	23-25 C	39-41 C	3-4	12 h 45 m	70-80 / 80-90%	Rain/mist 4x/wk	4-5	Nesting / hatchlings
June	28-31 C	23-25 C	39-42 C	4	13 h	72-82 / 82-92%	Rain/mist 4-5x/wk	4-5	Wet-season activity / hatch
July	28-31 C	23-25 C	39-42 C	4	12 h 55 m	72-82 / 82-92%	Rain/mist 4-5x/wk	4-5	Peak nesting / hatch
August	28-31 C	23-25 C	39-42 C	4	12 h 35 m	72-82 / 82-92%	Rain/mist 4-5x/wk	4-5	Late nesting / hatch
September	28-31 C	23-25 C	39-41 C	3-4	12 h 10 m	72-82 / 82-92%	Rain/mist 4-5x/wk	4-5	Wet-season maintenance
October	27-30 C	23-25 C	39-41 C	3-4	11 h 45 m	74-84 / 84-92%	Rain/mist 5x/wk	4	Heavy rain season
November	26-29 C	22-24 C	38-40 C	3	11 h 25 m	74-84 / 84-92%	Rain/mist 5x/wk	3-4	Heavy rain / recovery
December	25-28 C	21-23 C	38-40 C	3	11 h 15 m	72-82 / 82-90%	Rain/mist 4x/wk	3-4	Conditioning / courtship begins

Key distinction from other Ctenosaura: C. bakeri is a mangrove specialist, not a dry-forest species. Do not use the low-RH dry-season protocol used for C. similis or C. pectinata.

* RH, UVI and spray values are captive working targets. Keep strong ventilation and allow bark/branches to dry superficially between rain events even when the air remains humid.

Nesting contrast: the adult enclosure is humid and arboreal, but gravid females require a separate warm, deep sandy nesting area because successful oviposition does not occur in saturated mangrove mud.

Practical Husbandry and Daily Management

Humid mangrove husbandry: warm air, strong ventilation, high arboreal complexity, frequent rain, hollow refuges and a separate sandy nesting zone.

Enclosure and structure

Adults are strongly arboreal. For one adult, about 150 x 80 x 140 cm or larger is a practical starting point; breeding animals benefit from substantially more room. Provide multiple vertical and diagonal trunks, hollow cork/log refuges, elevated basking perches and dense visual cover. Refuge cavities should remain humid but not waterlogged.

Heat, gradient and UVB

Use moderate tropical air temperatures with a local basking surface around 38-42 C. Keep a cooler shaded zone around 25-27 C and never heat the whole enclosure to basking temperatures. A measured basking UVI around 3-4 is a practical target, with abundant canopy shade and hollow retreats below UVI 1.

Humidity, rain and ventilation

Maintain roughly 70-80% daytime RH and 80-90% overnight for much of the year, allowing seasonal peaks in the wettest months. Use frequent short rain/mist events but keep strong air exchange. The goal is humid moving air and periodically wet foliage/bark, not permanently soaked substrate or stagnant air.

Nesting setup

Gravid females leave mangrove habitat for sandy coastal nesting areas. Provide a separate or attached nest zone 40-60 cm deep where possible, using warm, diggable sand/soil with a lightly moist lower layer and drier upper layer. The female should be able to tunnel without the nest collapsing.

Adult diet

Adults are primarily herbivorous. Base feeding on varied leafy greens, edible browse, flowers and fibrous plant material. Black Mangrove leaves are a documented natural food and *Cocoplum* leaves have also been recorded. Offer fruit in moderation. Crabs and arthropods can be offered occasionally rather than as the staple.

Juvenile diet

Juveniles show a stronger tendency toward animal prey than adults. Offer frequent appropriately sized gut-loaded insects alongside tender greens and leaves, then gradually shift the diet toward plant dominance with age. Small crabs or equivalent crustacean prey can be used sparingly where nutritionally appropriate.

Social management

Males can be territorial, and hybridization with *C. similis* is a conservation concern. Keep breeding stock taxonomically isolated from other *Ctenosaura*. House adult males separately unless very large, behaviorally monitored facilities are available. Separate for biting, persistent pursuit or refuge exclusion.

Daily keeper checks

Check alertness, posture, grip, climbing, eyes/nose, toes/tail, appetite, feces, hydration and body mass. Verify that hollow refuges are clean and not stagnant. During breeding, record female mass, abdominal profile, nesting migrations/digging and any repeated use of the nest area.

Breeding, Eggs and Evidence Notes

A humid mangrove breeder that depends on warm sandy terrestrial nest sites; the nesting season is unusually long and double-clutching occurs.

Reproductive timing

Field and conservation sources describe a broad mating and nesting season. Nesting is recorded from February through August, with hatching from April through October. Some females have been documented double-clutching, so do not assume that one post-lay female is finished for the year.

Clutch size

Typical clutch size is about 11-16 eggs. Field monitoring has documented nests within gardens and other sandy human-modified sites as well as natural coastal habitat. A 2017 monitored nest containing 10 eggs achieved 100% hatching success.

Incubation

Natural incubation is approximately 85 days. A classic captive-breeding report used moist vermiculite at 29.5 C; 8 of 11 fertile eggs hatched after 89-92 days. This provides unusually useful direct captive guidance compared with many other rare *Ctenosaura*.

Nest management

Offer the nest site early and keep it available through the extended season. Deep substrate is important: field nests can extend over a metre horizontally and reach about 60 cm depth. Provide a stable tunnelable mix, a warm gradient and a lower zone that retains moisture without becoming saturated.

Evidence confidence

Mangrove habitat - High

Species is endemic to Utila and is strongly associated with mangrove/mangrove-edge habitat.

Humidity / climate - High-moderate

Island RH mostly high-70s to low-80s with rainfall year-round; enclosure values are captive translation.

Nesting season - High

Field/action-plan data: February-August.

Clutch size - High

Multiple sources: typically 11-16 eggs.

Incubation - High

About 85 d in field summaries; 89-92 d at 29.5 C in classic captive breeding.

Double clutching - High-moderate

Documented in tracked females.

Diet - High-moderate

Adults primarily mangrove vegetation plus crabs/arthropods; juvenile insect use is stronger.

Key references

1. IUCN SSC Iguana Specialist Group, Utila Spiny-tailed Iguana Conservation Action Plan 2020-2025: habitat, nesting February-August, clutch 11-16, double-clutching, ~85 d incubation and April-October hatching. 2. Gutsche (2005, 2006): distribution, mangrove habitat utilization, population structure and reproduction. 3. Kohler (1998), Salamandra: captive breeding; 11 fertile eggs incubated at 29.5 C, 8 hatched after 89-92 d. 4. Maryon et al. / IIF monitoring 2016-2017: nest tracking, double-clutching and hatchling observations. 5. Recent diet notes: mangrove/cocoplum leaves, fiddler crabs and arthropods.

UVI beneath the optional T5 tube

Ctenosaura bakeri

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

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](#).