

Iguana iguana - St. Thomas population

St. Thomas Green Iguana - U.S. Virgin Islands

Locality-specific captive schedule using St. Thomas seasonal climate; population genetics/taxonomy remain unusually complex.

Core profile	Active temperatures	Breeding anchor	Winter
Large arboreal herbivore from a warm Caribbean island population; deep nest substrate is essential for females.	27-32 C air; 37-42 C basking surface; measured UVI 4-6 at main basking zone.	Dry-season courtship/mating; nesting mainly late dry season; hatch as rainfall/plant growth increase.	No brumation. Use a drier Jan-Apr phase and wetter Aug-Nov phase rather than cold.

Annual keeper schedule

Month	Day	Night	Bask	UVI	Light	RH day/night	Rain / mist	Food d/wk	Seasonal management
January	27-30 C	22-24 C	37-41 C	4-6	11.2 h	55-70 / 70-80%	Light AM mist 3-4x/wk	6	Dry-season courtship / mating
February	27-30 C	22-24 C	37-41 C	4-6	11.6 h	50-68 / 70-80%	Light AM mist 3-4x/wk	6	Peak mating; watch male aggression
March	28-31 C	23-24 C	38-42 C	4-6	12.1 h	50-65 / 68-78%	Dry upper surfaces; humid nest	6	Gravid females / nest preparation
April	28-31 C	23-25 C	38-42 C	4-6	12.6 h	55-70 / 70-82%	Light mist; deep moist nest	5-6	Main laying window / recovery
May	28-31 C	24-25 C	38-42 C	4-6	13.0 h	60-75 / 75-85%	Rain/mist increasing	6-7	Post-lay recovery / incubation
June	29-32 C	24-26 C	38-42 C	4-6	13.2 h	65-80 / 78-88%	Daily AM rain/mist	7	Early wet phase; hatch window begins
July	29-32 C	24-26 C	38-42 C	4-6	13.1 h	65-80 / 78-88%	Daily AM rain/mist	7	Growth / hatchlings / browse abundant
August	29-32 C	24-26 C	38-42 C	4-6	12.8 h	70-85 / 82-92%	Rain/mist 1-2x/day	7	Wet season / recovery
September	29-32 C	24-26 C	38-42 C	4-6	12.3 h	70-85 / 82-92%	Rain/mist 1-2x/day	7	Wet season / body condition
October	28-31 C	24-25 C	37-41 C	4-6	11.8 h	72-88 / 85-95%	Frequent rain/mist	7	Peak wet phase / condition building
November	28-31 C	23-25 C	37-41 C	4-6	11.3 h	70-85 / 82-92%	Frequent rain; good ventilation	6-7	Wet phase easing
December	27-30 C	22-24 C	37-41 C	4-6	11.0 h	60-75 / 72-82%	Rain reduced; AM mist	6	Drying trend / reproductive conditioning

Reading the table: basking temperatures are surface temperatures, not enclosure air temperatures. RH targets describe an occupied enclosure with strong air exchange. The schedule is a St. Thomas-style environmental cueing model, not proof of the exact breeding month for every captive lineage.

Housing, climate and nutrition

Population identity and provenance

This protocol is for *Iguana iguana* from St. Thomas, U.S. Virgin Islands. The origin of the St. Thomas population is unusually complex. Published genetic work found St. Thomas mitochondrial haplotypes closely related to Caribbean iguanas from Saba/Montserrat, while historic and recent introductions may also have occurred in the USVI. Melanistic Virgin Islands iguanas have additionally been discussed in relation to *Iguana melanoderma*. Do not reassign an individual taxonomically from locality or colour alone; retain breeder/import records and use genetic testing if taxonomic identity matters.

Enclosure and structure

Large, diurnal and strongly arboreal. For a single adult, about **200 x 120 x 200 cm** is a practical indoor minimum starting point; larger is strongly preferred, and breeding adults benefit from room-scale accommodation. Provide thick horizontal and diagonal trunks, elevated resting shelves, visual barriers and a deep terrestrial section for females. Outdoor sun exposure in suitable weather is valuable when escape-proof and predator-safe.

Heat, basking and UVB

Keep daytime air around 27-32 C depending on season, with a broad basking surface around 37-42 C and cooler shaded retreats around 24-27 C. Nights can fall to about 22-26 C. Provide strong full-spectrum lighting; a measured basking-zone UVI around 4-6 is a practical captive target, with multiple shaded areas below UVI 1. Do not heat the entire enclosure to basking temperature.

Humidity, rain and seasonality

St. Thomas is warm year-round but has a meaningful rainfall cycle: the first part of the year is relatively dry, while late summer through autumn is wetter, with November typically among the wettest months and March among the driest. Reproduce that primarily through misting/rain frequency, not cold. Upper branches should dry between spray events while humid retreats, drinking opportunities and fresh vegetation remain available.

Diet

Adults should be overwhelmingly herbivorous. Base the diet on varied calcium-rich leafy greens, safe browse, leaves and flowers, with fibrous vegetables and a smaller seasonal fruit component. Rotate plant families rather than relying on one staple. Avoid routine animal protein in adults; green iguanas are primarily folivorous/herbivorous, and excess animal protein or energy-dense fruit can promote obesity and metabolic problems.

Breeding, nesting and evidence notes

Breeding cycle

Green iguanas generally breed in the dry season so incubation occurs through relatively dry months and young emerge as rains and fresh plant growth increase. For a St. Thomas-style cycle, use December-February for reproductive conditioning/courtship, March-April for gravid females and nesting, and late spring/summer as the expected incubation/hatching period. Individual lines may shift by several weeks.

Nesting and incubation

Provide a secluded, diggable nest before females become visibly gravid: roughly 45-60+ cm of compactable sandy soil/soil mix is a useful captive target, with multiple depth/moisture choices. Published *I. iguana* data commonly report around 10-30 eggs, with larger females capable of substantially larger clutches. A conservative incubation starting point is about **28.5-30 C** with stable moisture and excellent gas exchange; incubation commonly lasts roughly **90-120 days**. Avoid waterlogged media and large temperature spikes.

Social management and keeper warning

Adult males can become extremely territorial in breeding condition and should not be housed together. Even pairs require enough space for the female to avoid the male. Monitor reproductive females for reduced appetite, persistent digging, straining or failure to lay. Also watch for rostral trauma, toe/tail injuries, dehydration, renal/metabolic disease, obesity and burns from poorly guarded heat sources.

Evidence anchors

- NOAA/NWS San Juan, 1991-2020 U.S. Virgin Islands climate normals: St. Thomas is warm year-round; autumn is the wettest part of the year, November is typically among the wettest months, and March is among the driest.

- De Jesus Villanueva et al. 2021, Biological Invasions 23:2591-2610, DOI 10.1007/s10530-021-02524-5: St. Thomas samples carried haplotypes closely linked to native Caribbean iguanas from Saba/Montserrat, unlike many invasive Caribbean populations derived largely from Colombia/El Salvador pet-trade stocks.

- Breuil et al. 2020, ZooKeys 926:95-131: melanistic iguanas from the Virgin Islands were discussed as closely related to the Saba/Montserrat lineage described as *Iguana melanoderma*; the authors emphasized that further genetic work was needed for Virgin Islands populations.

- IUCN SSC Iguana Specialist Group and classic green-iguana nesting studies: reproduction is tightly synchronized with tropical wet/dry seasons; mating/nesting generally occur in the drier period so young emerge near the onset of rains and fresh leaf production.

- General *Iguana iguana* reproductive data: commonly about 10-30 eggs, with much larger clutches possible; incubation is often about 90-120 days near the upper 20s to around 30 C. Locality, maternal size, substrate water potential and incubation temperature materially affect outcome.

Review date: 2 October 2026. This protocol deliberately keeps the animal labelled as *Iguana iguana* - St. Thomas population unless individual pedigree/genetic evidence supports a more specific taxonomic assignment.

UVI beneath the optional T5 tube

Iguana iguana - St. Thomas population

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

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](#).