# *Iguana iguana insularis*

**Grenadines Horned Iguana / Pink Rhino Iguana**

Southern Lesser Antilles - locality-sensitive dry/wet-season breeding and keeper protocol.

| Core profile | Active temperatures | Breeding anchor | Winter |
|---|---|---|---|
| Large arboreal herbivore of the Grenadines; exact island provenance is important because introgression occurs. | 27-31 C air; 38-42 C basking surface; measured UVI 4-6 at primary basking zone. | Dry-season courtship and nesting; wild nesting documented in April on Carriacou. | No brumation. Use a drier Jan-May phase and wetter Jun-Dec phase. |

## Annual keeper schedule

| Month | Day | Night | Bask | UVI | Light | RH day/night | Rain / mist | Food d/wk | Seasonal management |
|---|---|---|---|---|---|---|---|---|---|
| January | 27-30 C | 23-24 C | 38-41 C | 4-6 | 11.5 h | 55-70 / 70-80% | Light AM mist 3x/wk | 6-7 | Dry season; reproductive conditioning |
| February | 27-30 C | 23-24 C | 38-41 C | 4-6 | 11.8 h | 50-68 / 70-80% | Light AM mist 3x/wk | 6-7 | Courtship / mating; watch males |
| March | 28-31 C | 23-25 C | 38-42 C | 4-6 | 12.1 h | 50-65 / 68-78% | Dry upper surfaces; humid nest | 6-7 | Gravid females / nest preparation |
| April | 28-31 C | 24-25 C | 38-42 C | 4-6 | 12.4 h | 55-70 / 72-82% | Light mist; deep moist nest | 6-7 | Main nesting window; April wild nesting recorded |
| May | 28-31 C | 24-25 C | 38-42 C | 4-6 | 12.6 h | 58-72 / 75-84% | Rain slowly increasing | 7 | Late dry season / post-lay recovery |
| June | 29-31 C | 24-26 C | 38-42 C | 4-6 | 12.8 h | 65-80 / 80-90% | Daily AM rain/mist | 7 | Wet season begins; incubation |
| July | 29-31 C | 24-26 C | 38-42 C | 4-6 | 12.8 h | 68-82 / 82-92% | Daily rain/mist | 7 | Likely hatch window / growth |
| August | 29-31 C | 24-26 C | 38-42 C | 4-6 | 12.6 h | 70-85 / 84-94% | Rain/mist 1-2x/day | 7 | Wet season / browse abundant |
| September | 29-31 C | 24-26 C | 38-42 C | 4-6 | 12.3 h | 70-85 / 84-94% | Rain/mist 1-2x/day | 7 | Wet season / juvenile growth |
| October | 28-31 C | 24-25 C | 37-41 C | 4-6 | 12.0 h | 70-85 / 84-94% | Frequent rain; ventilate well | 7 | Wet season / adult recovery |
| November | 28-30 C | 23-25 C | 37-41 C | 4-6 | 11.7 h | 65-82 / 80-90% | Frequent showers | 6-7 | Wet phase easing |
| December | 27-30 C | 23-24 C | 37-41 C | 4-6 | 11.5 h | 60-75 / 75-85% | Rain reduced; AM mist | 6-7 | Drying trend / breeding onset |

**Reading the table:** basking temperatures are surface temperatures, not enclosure air temperatures. RH targets assume excellent ventilation. This is a Grenadines-style captive cueing model; exact timing can shift with island origin and established captive lineage.

# Housing, climate and nutrition

## Taxonomy and provenance

This protocol uses *Iguana iguana insularis*, the treatment retained by the Reptile Database and the 2025 IUCN SSC Iguana Taxonomy Working Group. Breuil and colleagues instead recognize a full species, *Iguana insularis*, with the Grenadines form as *I. insularis insularis*. The lineage occurs across the Grenadines; some island populations remain genetically relatively pure while others show introgression from introduced green iguanas. Preserve exact island provenance and pedigree whenever possible.

## Enclosure and structure

A large, powerful arboreal iguana requiring substantial horizontal and vertical space. For one adult, about **200 x 120 x 200 cm** is a practical indoor minimum starting point; larger or room-scale housing is strongly preferred. Provide heavy climbing trunks, broad elevated shelves, visual barriers, sunny basking sites and a deep terrestrial nesting area for females.

## Heat, basking and UVB

Maintain daytime air around 27-31 C through most of the year, nights about 23-26 C and a broad basking surface around 38-42 C. Provide strong full-spectrum lighting. A measured UVI around **4-6** at the main basking zone is a practical captive target, with multiple shaded retreats below UVI 1. Avoid heating the entire enclosure to basking temperature.

## Humidity, rainfall and seasonality

The Grenadines are warm all year but strongly seasonal in rainfall. The regional dry season is generally January-May; June-December is wetter, with roughly three quarters of annual rainfall in the wet season in Grenada-region climate data. Reproduce this mainly by changing rain/mist frequency, not temperature. Even in the dry phase, provide drinking water and a humid refuge; in the wet phase maintain excellent air exchange.

## 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 and offer coarse browse for normal gut function. Avoid routine animal protein and avoid allowing breeding adults to become obese before the reproductive season.

## Breeding, nesting and evidence notes

### Breeding cycle

Direct observations show Grenadines *insularis* nesting in April on Carriacou. A practical captive cycle is therefore to build condition in December-January, allow courtship/mating through January-March, prepare deep nests by March, and expect laying mainly around March-April. Incubation then overlaps the transition into the wetter season, when vegetation and food availability rise.

### Nesting and incubation

Provide a secluded, diggable nest before the female becomes heavily gravid: roughly 45-60+ cm of compactable sandy soil/soil mix is a useful captive target, with several moisture/depth choices. Peer-reviewed clutch-size and incubation trials specific to *I. i. insularis* remain scarce, so do not invent locality-specific numbers. As a green-iguana baseline, clutches are often around 10-30 eggs and incubation commonly about 90-120 days. Start around **28.5-30 C** with stable moisture and good gas exchange, then adjust only from your own proven line data.

### Social management and conservation warning

Adult males can become highly territorial in reproductive condition and should not be housed together. Even pairs need enough room and visual structure for the female to avoid the male. Because introduced *Iguana* lineages hybridize readily with the Grenadines lineage, maintain pedigree separation and never mix breeding animals of uncertain provenance if conservation-value purity matters. Monitor females closely for dystocia and all adults for rostral trauma, burns, dehydration, obesity and renal/metabolic disease.

## Evidence anchors

- Reptile Database (accessed 2 Oct 2026) and IUCN SSC Iguana Taxonomy Working Group checklist (2025): retain Iguana iguana insularis for the Grenadines population. Breuil et al. 2022 instead elevate Iguana insularis to species rank and call the Grenadines form I. insularis insularis.

- Breuil et al. 2022, ZooKeys 1086:137-161: the Grenadines lineage extends from Bequia south at least to Petit St. Vincent; many island populations retain relatively pure insularis ancestry, while introgression is documented on some islands. Nesting by animals matching I. i. insularis was photographed in April 2020 on Carriacou.

- Grenadines climate analyses: a pronounced dry season generally occurs January-May; Grenada-region climate reporting places about 77% of annual rainfall in the June-December wet season. The smaller Grenadine islands are generally drier than mountainous main islands.

- Miller 1987, Zoo Biology 6:225-236: artificial incubation of 829 eggs from 21 Iguana iguana clutches produced 94.6% mean hatch success and 92.1 days mean incubation; temperature, water conditions and egg arrangement strongly affected success.

- General Iguana iguana reproductive biology is used only where insularis-specific data are absent. Locality-specific clutch size, nest temperature and incubation optima remain insufficiently quantified, so retain records from your own breeding line and refine the protocol from proven outcomes.

**Review date:** 2 October 2026. Taxonomy remains actively debated; this protocol follows the current Reptile Database / Iguana Taxonomy Working Group treatment *Iguana iguana insularis* while explicitly noting the alternative *Iguana insularis insularis*.

# UVI beneath the optional T5 tube

Iguana iguana insularis

## 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.