

Iguana delicatissima

Lesser Antillean Iguana / West Indian Iguana

Species-specific annual husbandry and breeding protocol based primarily on the 2023 EAZA Best Practice Guidelines and published Lesser Antillean field data.

Core profile

Critically endangered Lesser Antillean endemic; arboreal herbivore with strong seasonal reproductive cycling.

EAZA thermal target

38-45 C basking year-round; seasonal ambient air 26-34 C by day and 18-28 C at night.

UV / light

Adults: measured UVI 5-6 at basking; deep zero-UV shade. Annual photoperiod about 10-14 h.

Breeding anchor

Usually one clutch; 4-30 eggs reported. Laying timing varies strongly by island climate; hatch often Aug-Sep.

Annual keeper schedule

Month	Day air	Night	Bask	UVI	Light	RH day/night*	Rain / mist	Food d/wk	Seasonal management
January	26-28 C	18-22 C	38-45 C	5-6	10.2 h	55-70 / 70-82%	AM mist; 3-4x/wk	6	Dry-season cycling / conditioning
February	26-28 C	18-22 C	38-45 C	5-6	10.5 h	55-70 / 70-82%	AM mist; 3-4x/wk	6	Dry season; breeding activity may begin
March	26-30 C	20-24 C	38-45 C	5-6	11.0 h	58-72 / 72-84%	AM mist; nest available	6	Mating / early laying in mesic lines
April	28-32 C	22-26 C	38-45 C	5-6	11.8 h	62-76 / 76-88%	Daily AM mist	6-7	Wet-season transition / gravidity
May	28-32 C	22-26 C	38-45 C	5-6	12.5 h	65-80 / 80-92%	Daily AM + PM mist	7	Wet phase / nesting
June	30-34 C	24-28 C	38-45 C	5-6	13.2 h	68-82 / 82-94%	AM + PM mist	7	Peak nesting in xeric populations
July	30-34 C	24-28 C	38-45 C	5-6	14.0 h	68-82 / 82-94%	AM + PM mist	7	Nesting / incubation
August	30-34 C	24-28 C	38-45 C	5-6	13.5 h	70-85 / 84-95%	AM + PM mist	7	Late nesting / hatch window
September	30-34 C	24-28 C	38-45 C	5-6	13.0 h	70-85 / 84-95%	AM + PM mist	7	Hatching / wet-season growth
October	28-32 C	22-26 C	38-45 C	5-6	12.0 h	68-82 / 82-94%	Daily AM + lighter PM mist	7	Wet phase easing / recovery
November	28-32 C	22-26 C	38-45 C	5-6	11.0 h	62-78 / 78-90%	Daily AM mist; PM as needed	6-7	Transition to drier season
December	26-30 C	20-24 C	38-45 C	5-6	10.2 h	58-72 / 72-85%	AM mist; reduce rain	6	Dry-season reset / conditioning

* UVI 5-6 is the EAZA adult basking target. The RH percentages are practical operational targets inferred from EAZA seasonal spray guidance and Lesser Antillean climate; they are not published species thresholds. Basking values are surface temperatures, not enclosure air temperatures.

Housing, climate and nutrition

Taxonomy and conservation

Iguana delicatissima Laurenti, 1768 is currently recognized as a full species with no accepted subspecies in the Reptile Database. It is a Critically Endangered Lesser Antillean endemic. Pure populations are threatened by hybridization with introduced *Iguana iguana*, so exact island provenance and pedigree should be preserved in any breeding collection.

Natural habitat and island variation

The species occupies xeric scrub, dry woodland, littoral woodland, mangroves and transitional rainforest. Wild populations occur across an enormous rainfall gradient, from very dry islands receiving under 1,000 mm annually to mesic forest approaching 3,000-4,000 mm. Island origin therefore matters: do not force a Dominica-type animal into a Petite-Terre-style dry regime, or vice versa.

Enclosure and social space

For adults, EAZA recommends at least 180 cm enclosure height, with floor area exceeding 3 m² for one adult or 4 m² for a pair; larger is preferable. Provide massive rough-barked trunks, broad basking branches, vertical escape options and visual barriers. Reproductive females are unusually stress-sensitive and need quiet housing and secure nesting options.

Heat, basking, UVB and photoperiod

EAZA recommends a broad basking zone at 38-45 C throughout the year. Ambient air should vary seasonally from about 26-28 C by day / 18-22 C at night in Jan-Feb to about 30-34 C / 24-28 C in Jun-Sep. Adults should have UVI 5-6 at the main basking zone, declining to zero in shaded retreats. Adjust ambient lighting from about 10 h in winter to 14 h in summer.

Humidity and seasonal rainfall

The Lesser Antilles remain relatively humid even in the dry season. EAZA simulates seasonality mainly by reducing rainfall, not by making the air desert-dry. Spray in the morning year-round; during the wet season add a second evening spray. Surfaces should partially dry while humid refuges and drinking water remain available.

Diet

This species is a generalist herbivore. Feed a very diverse daily mix of dark leafy greens, herbs, safe browse and flowers. During the wet season add modest amounts of ripe fruit and fibrous vegetables. EAZA discourages routine animal protein and commercial iguana pellets. Calcium is best obtained from a high-quality varied plant diet and strong UVB, with supplements used sparingly.

Water

Provide a clean water bowl every day. A large pond is not required for this species, although it can help humidity. Captive *I. delicatissima* generally does not choose to soak frequently despite being able to swim well.

Important: because the species is Critically Endangered and hybridization with common green iguanas is one of its principal extinction threats, breeding animals should never be mixed with uncertain-origin Iguana stock if lineage purity matters.

Breeding, nesting and evidence notes

Annual breeding cycle

EAZA emphasizes that the reproductive season varies by island climate. Xeric populations such as Petite-Terre / La Desirade are relatively synchronous, usually laying one clutch from June to mid-August. Mesic populations can be much more asynchronous: laying may begin in February or March and continue into August or September. Use your animals' documented island origin to fine-tune timing.

Clutch size and maturity

Published and managed-population data report roughly 4-26 eggs in many modern accounts, with historical island reports extending to about 30. EAZA notes 20-30 on Martinique, 13-25 on Guadeloupe and up to 26 from Dominica-origin animals. Captive animals may become reproductively active by roughly 2-3 years, though wild maturity can be later.

Nesting site

A suitable nest must be available to females even when no male is present. EAZA recommends a permanent sandy nesting area at least 50 cm deep, compact enough to hold tunnels, with egg-chamber depth substrate around 28-30 C. Females may dig tunnels approaching 1 m. A mix around 3:1 sand:soil in a large bin can work for some individuals.

Artificial incubation

EAZA uses moist medium-grain vermiculite, commonly around 1:1 vermiculite:water by weight, with eggs about half to two-thirds buried. Captive success is reported at a constant 29-31 C with approximately 83-97 days incubation; Vienna Zoo also hatched eggs at 28 C after 94 days. Keep temperature stable, medium moist but not saturated, and ensure gas exchange.

Hatching and juveniles

Wild hatchlings commonly emerge a few weeks after the onset of the rainy season, often August-September. EAZA recommends rearing fresh hatchlings in small groups (often 6-8) when practical, because group feeding behaviour can help timid young begin eating. Juvenile UVI should be more conservative, around 3-4 at the basking zone.

Health / keeper priorities

Key risks include reproductive stress and dystocia, chronic dehydration, burns from undersized basking spots, poor UVB, obesity, renal disease and social stress. Adult males should not be crowded together. During nesting, females may be stressed by male presence; temporary separation can be beneficial.

Evidence anchors: EAZA Best Practice Guidelines (Goetz, Schmidt & Weissenbacher 2023) provide the primary captive targets for enclosure size, seasonal temperatures, basking, UVB, diet, nesting and incubation. Reptile Database confirms current taxonomy. Published field literature summarized by EAZA documents strong island-level variation in rainfall and laying season.

Keeper interpretation: The monthly RH figures and misting frequency in this protocol are operational targets built from EAZA's dry/wet-season spray guidance, not experimentally defined physiological limits. Adjust using measured ventilation, hydration, shedding, appetite, faeces, body condition and individual island provenance.

UVI beneath the optional T5 tube

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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	5-6
February	5-6
March	5-6
April	5-6
May	5-6
June	5-6
July	5-6
August	5-6
September	5-6
October	5-6
November	5-6
December	5-6

Retain numbers; clarify measurement

Retain adult UVI 5-6: EAZA species-specific guidance supports it. The juvenile recommendation is 3-4, with a full gradient to shade. Adult values should not be copied to juveniles.

Evidence level: Species-specific published husbandry guidance. 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; EAZA (2023), Iguana delicatissima Best Practice Guidelines. Full rationale and monthly comparison: [UVI_Audit_Report.html](#).