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IGUANAS

Serrated Casquehead Iguana

Laemanctus serratus

Laemanctus serratus is an extremely slender, tree-dwelling lizard from the forests of eastern Mexico and Central America. It has long legs, an even longer tail, a small, backward-pointing casque with a serrated rear edge and a saw-toothed crest down its back. It is diurnal and eats insects. Its care is barely described and is based on its habitat and on its relative *Corytophanes cristatus*.

Family: Corytophanidae Former name: *Laemanctus alticoronatus*

KEY FACTS

THE ANIMAL

Adult size	**70 cm** total length incl. tail
Lifespan	**5-8 years**
Active	**By day**
Lifestyle	**Arboreal**
Habitat	**Dry forest and rainforest**
Difficulty	**Experienced**

CARE

Min. enclosure	**100 × 50 × 120 cm** L × W × H for 1 adult
Temperature, day	**27-30 °C**
Basking spot	**32-35 °C**
Temperature, night	**21-24 °C**
Humidity	**60-80%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 2
Diet	**Insects**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**3-5 eggs**
Incubation	**60-90 days** at 26-28 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Least Concern (LC)**

About the species

Laemanctus serratus is a very slender, laterally compressed lizard with long, thin legs, long toes and a tail that is far longer than the body. The genus reaches about 70 cm in total, and the tail is almost three times as long as the body from snout to vent. The top of the head slopes forward, and the back of the head extends into a low, backward-pointing casque. The species differs from *Laemanctus longipes*, which lacks both a serrated casque and a dorsal crest, in the rear edge of the casque, which has a row of enlarged, flat, cone-shaped scales, and in a low, saw-toothed crest of enlarged, pointed scales along the middle of the back. The body is covered in keeled scales. A strong transverse fold is present at the throat, but there is no gular pouch.

Lizards of this genus are green or brown with darker crossbands, and some have lighter longitudinal stripes. Males and females have the same head shape and an equally large casque; at most they differ in body size. The casque of this genus is the least developed in the family.

The species was described by Edward Drinker Cope in 1864 from a specimen from the Orizaba valley in Veracruz. The species name is Latin and means saw-toothed, referring to the rear edge of the casque. Two subspecies are recognised: *L. s. serratus* and *L. s. alticoronatus* from Yucatán, which was described as a separate species in 1866. The genus has four species, including

Laemanctus longipes, and the family also includes *Corytophanes cristatus* and the basilisks, for example *Basiliscus vittatus*.

L. serratus is rare in the trade and barely described in captivity. It is an animal for specialists who are prepared to work with incomplete knowledge.

Distribution and habitat

Laemanctus serratus lives in eastern and southern Mexico, from Tamaulipas and San Luis Potosí in the north through Hidalgo, Puebla, Querétaro, Veracruz, Oaxaca and Chiapas to the Yucatán Peninsula (Campeche, Yucatán and Quintana Roo), and on into Belize, Guatemala and Honduras. The nominate form, *L. s. serratus*, lives from central Veracruz northwards, and *L. s. alticoronatus* in Yucatán.

An older record from Guanajuato is an error: the locality lies in San Luis Potosí.

> **Native range:** Mexico, Belize, Guatemala and Honduras.

HABITAT

The species lives in forest, where it climbs in trees and bushes and rarely comes down to the ground. It is diurnal. Its range includes both humid and relatively dry forest, but which forest types the species prefers is not documented in any detail.

Like the other species of the genus, *L. serratus* is an insectivore. Its colour, green or brown, matches foliage and branches. The female lays eggs, but nesting and egg-laying have not been described for the species.

Care

THE ENCLOSURE

Very little is known about the care of *Laemanctus serratus*. The care advice is therefore based on its habitat (forest in a warm climate, trees and bushes) and on *Corytophanes cristatus*, which is the closest and better-known relative in captivity. Figures borrowed from it are marked in the text.

A single adult needs a tall, roomy enclosure of at least 100 × 50 × 120 cm (length × width × height). The species is far longer than *C. cristatus* and needs room for its long tail, so the enclosure is larger than for that species. This is an estimate, not a documented limit. Height matters, because the species lives in trees.

Furnish the enclosure with many vertical and sloping branches of different thicknesses, anchored firmly in the floor and walls, and with dense foliage from robust plants such as *Epipremnum* and *Philodendron*, so that the animal can stay hidden and choose between sun and shade. The substrate is at least 10 cm of coconut fibre and garden soil with dead leaves on top. The enclosure must be tight enough to hold humidity but well ventilated, and the lid must be secure. Keep only one animal per enclosure. Cover part of the front with background or plants so that the animal feels secure; a frightened animal can run into the glass and injure its snout.

Read more: Humidity, misting and ventilation

TEMPERATURE

The species is diurnal and lives in warm forest. The air should be 27-30 °C by day, and the basking spot, a thick branch under a lamp, should have a surface temperature of 32-35 °C, measured with an infrared thermometer. The coolest part of the enclosure, at the bottom, is 24-27 °C. At night the temperature should be 21-24 °C and never below 20 °C. These figures are borrowed from *Corytophanes cristatus*.

All lamps must be shielded so that the animal cannot burn itself. Use low-wattage halogen spots or a white heat bulb above the basking branch. If the room is cold at night, a ceramic heat emitter on a thermostat can maintain the minimum temperature without light. Heat mats are not suitable. Measure with digital probes at the basking spot and in the cool end.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be 60-70 % by day and rise to 70-80 % at night. The figure is borrowed from *Corytophanes cristatus*. Mist the enclosure and the plants 1-2 times a day, or use a fogger or rain system on a timer, and measure with a digital hygrometer in the middle of the enclosure. The animals drink droplets from the leaves. A shallow bowl of fresh water may stand in the enclosure, but it is rarely used.

The air should not stand damp and still: do not sacrifice ventilation for humidity, or mould will grow.

LIGHTING AND UVB

Laemanctus serratus is diurnal and needs UVB all day. Ferguson zone 2 is an estimate based on its way of life, not a measurement: the species sits in trees and bushes and is not a pronounced basker. Use a T5 HO tube in a reflective fixture above the uppermost branches. The distance depends on the lamp type, so follow the manufacturer's instructions and measure the UV index if possible. UVB does not pass through glass or plastic, and tubes are replaced according to the manufacturer's instructions.

The light is on for 12-13 hours a day, controlled by a timer. Supplement with a plant light of about 6500 K, which also helps the live plants grow. Direct sun in a glass enclosure is dangerous, because the animal cannot get away from the heat.

Read more: Lighting and UVB

FEEDING

The species is an insectivore. Offer cockroaches (such as discoid and dubia), grasshoppers, crickets, silkworms, hornworms and superworms, and earthworms now and then. The feeder should be no larger than the animal's head. Which prey the species takes in the wild is not documented; the diet is based on what *Corytophanes cristatus* takes, namely large, slow arthropods. Fatty feeders such as mealworms and waxworms are given only occasionally.

Juveniles are fed daily, adults every other day, with as much as the animal eats in about 5 minutes. The animal is a sit-and-wait hunter, so the feeders must be alive and moving; tweezers or a feeding cage in the upper part of the enclosure help. Dust the feeders lightly with calcium at most meals and with a vitamin supplement 1-2 times a week. Gut-load the feeders with a complete feed for 1-2 days before offering them. Weigh the animal regularly.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

The species is not suitable for handling, and how it reacts to disturbance is not documented. Its relative *Corytophanes cristatus* is shy and sensitive, so approach and leave the enclosure calmly and leave the animal in peace during feeding.

Wild-caught animals are often dehydrated, emaciated and full of intestinal parasites. Quarantine, a reptile vet and patient rehabilitation with humidity and small, frequent meals are the first priorities.

Read more: Quarantine and hygiene Read more: Buying animals: captive-bred, wild-caught and transport

Breeding

SEXUAL MATURITY AND SEXING

Age and size at sexual maturity are not documented for *Laemanctus serratus*. Males and females have the same head shape and casque, so the sexes are hard to tell apart, and sexing requires experience or a vet. Lifespan is not documented either; the 5-8 years in the box is an estimate borrowed from *Corytophanes cristatus*.

MATING

Mating in captivity is not documented for the species. Keep the animals separately and, if breeding is attempted, put them together only under supervision in a large, densely planted enclosure with many hiding places. Separate them immediately at any sign of stress or biting.

EGG-LAYING AND CLUTCHES

The species is oviparous. Clutches are 3-5 eggs for the genus, but the figure is not documented for the species itself. Give the female a deep tray or box of moist, loose mix of soil, coconut fibre and leaf litter so that she can dig. If she digs without laying, or seems lethargic and loses her appetite, it may be egg binding, and a vet should be contacted.

Read more: Common diseases and signs of illness

INCUBATION

Incubation time and temperature are not documented for *Laemanctus serratus*. The figures in the box, 60-90 days at 26-28 °C, are borrowed from *Corytophanes cristatus*, which has the same kind of eggs. The eggs have a soft shell, must not dry out, and are moved carefully, with the same side up, to moist vermiculite.

Read more: Incubating eggs

REARING THE YOUNG

Rearing of young is not documented for the species. If any young hatch, they need a smaller enclosure with the same climate as the adults, many twigs and plants, and small feeders such as fruit flies, small crickets and small cockroaches, dusted with calcium, and daily misting so that they can drink.

Health and common mistakes

The species is almost unknown in captivity, so the following are the typical problems for lizards of the genus and for diurnal, tree-dwelling lizards in captivity:

- Dehydration and emaciation in newly acquired, wild-caught animals.
- Metabolic bone disease from too little UVB, calcium and D3.
- Shedding problems at too low humidity and respiratory infections with poor ventilation.
- Snout injuries from hitting the glass.
- Burns if the animal touches a lamp.
- Intestinal parasites, especially in wild-caught animals; new animals are kept in quarantine.

Weight loss, reduced appetite, lethargy and nasal discharge require a vet with experience in reptiles.

Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.