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IGUANAS

Common Puerto Rican Anole

Anolis cristatellus

Anolis cristatellus is a stocky, diurnal anole from Puerto Rico and the Virgin Islands. The male has a tall, fin-like crest on the tail that is always erect, and a greenish-yellow dewlap with an orange-red margin, which he extends while bobbing and doing push-ups. The species lives on trunks and low down in the vegetation, is territorial and very shy, and needs UVB, live food and an enclosure with both branches and floor space.

Family: Dactyloidae Former name: *Anolis cozumelae; Anolis lindeni; Ctenonotus cristatellus*

KEY FACTS

THE ANIMAL

Adult size	**15-20 cm** total length incl. tail
Lifespan	**4-8 years**
Active	**By day**
Lifestyle	**Arboreal and terrestrial**
Habitat	**Dry forest and rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 45 × 60 cm** L × W × H for 1 adult
Temperature, day	**26-29 °C**
Basking spot	**32-35 °C**
Temperature, night	**20-24 °C**
Humidity	**60-80%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 2
Diet	**Insects**
Kept	**Singly or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1-2 eggs**
Incubation	**45-55 days** at 26-28 °C

PROTECTION AND PAPERWORK

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

About the species

Anolis cristatellus is a small to medium-sized, sturdily built anole with a broad neck and a short, wedge-shaped snout. The base colour is bronze-brown to greyish green with indistinct, irregular brown spots, and the belly is greenish yellow. The animal can change from pale grey to reddish brown and almost black depending on mood and light. The male is recognisable by the tall, sail-like crest along the tail, which is always erect and supported by extended vertebrae; the tail is laterally compressed. The female has a lower crest. The male's throat dewlap is greenish yellow with a burnt orange to reddish margin, and the female's is smaller.

The total length is 15-20 cm including the tail. The male reaches about 8 cm from snout to vent, and the female is smaller and more slender. Juveniles are about 5 cm long and have cross-bands and often a pale stripe along the back, which some females keep as adults.

The species was described in 1837 by Duméril and Bibron. It belongs to the so-called trunk-ground anoles, which live on the lowest metres of tree trunks and go to the ground to feed and lay eggs. Two subspecies are recognised: the nominate form on Puerto Rico and *A. c. wileyae* on the islands east of Puerto Rico.

A. cristatellus is an animal to watch, not to handle. It is shy, quick and territorial, and the males fight one another. The species has been introduced to Florida, the Dominican Republic, Costa Rica and Dominica, among other places, where it thrives in towns and disturbed land, so an animal must never be released.

Distribution and habitat

Anolis cristatellus is native to Puerto Rico with several smaller surrounding islands, to Vieques, Culebra and Culebrita, and to the US and British Virgin Islands. The species has been introduced to south-eastern Florida, the Dominican Republic, Costa Rica and Trinidad, among other places. The map shows only the native range.

> **Native range:** Puerto Rico, US Virgin Islands and British Virgin Islands.

HABITAT

The species occurs in almost every habitat on Puerto Rico and the Virgin Islands, from open fields and scrub to rainforest, from sea level up to about 1000 m. It is common on trunks, fence posts, walls and house walls in towns and gardens. It is diurnal and sits mostly in the lowest two metres of trunks, climbing higher only occasionally.

The males defend a territory of 2-19 m² by bobbing, doing push-ups and extending the dewlap. The females have smaller territories, which overlap the male's. The species feeds mostly on insects, but also on small fruits, frogs and smaller lizards. It watches for prey from a perch on the trunk and hunts by sight.

Care

THE ENCLOSURE

Little is known about keeping *Anolis cristatellus*. The figures for temperature, humidity, light and incubation are borrowed from *Anolis sagrei* and *Anolis carolinensis*, which are kept far more often and have almost the same requirements.

A single adult needs an enclosure of at least 60 × 45 × 60 cm (length × width × height). Larger is better. The species sits vertically on trunks and thick branches and goes down to the floor to hunt, so the enclosure needs both thick, slanting branches and a floor to run on. Cork and sections of trunk on the back wall provide the vertical surfaces it prefers.

Furnish with branches at several heights, cork, vines and dense foliage from live plants such as *Epipremnum* or *Philodendron*. The substrate is at least 5 cm of coconut fibre and garden soil with a layer of leaf litter on top. Remove droppings daily, and replace the whole substrate every 3-4 months. The enclosure should preferably open at the front and be well ventilated, and the lid must be secure, because the species is quick and escapes easily.

As a rule, keep one animal per enclosure. The males are strongly territorial and must never share, and more animals easily lead to fights and stress.

Read more: Humidity, misting and ventilation Read more: Incubating eggs

TEMPERATURE

The air should be 26-29 °C by day, and the basking spot should have a surface temperature of 32-35 °C, measured with an infrared thermometer. The cooler side is 24-26 °C. At night 20-24 °C is suitable. The warmest spot should be at the top or on a thick branch, and the animal must always be able to move away from the heat.

Use a halogen spot over a branch and shield it so the animal cannot burn itself. Heat mats and coloured bulbs are not suitable. Measure with digital probes at the basking spot and at the cool end. If the room is cold at night, a ceramic heat emitter on a thermostat can maintain the minimum temperature without light.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be 60-80 %: lower in the middle of the day and higher at night. Mist the plants and the enclosure morning and evening with a pressure sprayer, or use a fogger or rain system on a timer, and measure with a digital hygrometer in the middle of the enclosure. Anoles drink the water droplets from leaves, and many animals do not take water from a bowl; a

small bowl of fresh water and a dripper help.

Ventilation must not be sacrificed for humidity. If the air is wet and still, mould grows and the animal develops respiratory problems.

LIGHTING AND UVB

Anolis cristatellus is diurnal and needs UVB every day to produce vitamin D3 and absorb calcium. The UVB lamp should give Ferguson zone 2, i.e. a moderate UV index at the basking spot. A 6 % T5 HO tube or equivalent lamp in a reflective fixture is suitable if the distance to the branch matches the lamp's strength, so follow the manufacturer's instructions and measure if possible. UVB does not pass through glass or plastic, so a window is no substitute. Replace the tube according to the manufacturer's instructions, usually every year.

The light is on for 12 hours a day and can follow the seasons: about 14 hours in summer and 10 hours in winter. Add a plant light of about 6500 K, which also helps the live plants grow. At night it is switched off completely.

Read more: Lighting and UVB Read more: Calcium, vitamins and supplements

FEEDING

The species is insectivorous and takes live prey that moves: crickets, cockroaches (such as dubia and discoid), grasshoppers, silkworms, hornworms, small superworms and soldier fly larvae. Feeder insects should be a little smaller than the animal's head. Variety is important, and fatty feeders such as mealworms and waxworm larvae are given only occasionally. A few small pieces of fruit can be offered rarely.

Juveniles are fed daily, and adults every other day with 2-3 feeder insects at a time. Dust the feeders lightly with calcium without D3 at every meal and with a multivitamin 2-3 times a month, and gut-load the feeders for 1-2 days before feeding them on. The animal hunts from a perch, so a low feeding platform on a branch in the middle of the enclosure is practical. Fresh water is changed daily, and the animal also drinks droplets from misted leaves.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

The species is shy, quick and not an animal for handling. It can drop its tail, and it does not grow back in the same form. The male is strongly territorial and bobs his head, does push-ups and extends the dewlap towards other males and towards his own reflection, so avoid mirrors in the enclosure. The animal changes colour with mood, and a sudden dark colour is a sign of stress.

Approach and leave the enclosure calmly, and leave the animal in peace while it is feeding. Captive-bred animals settle better than wild-caught ones. Newly acquired animals are kept in quarantine.

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

Breeding

SEXUAL MATURITY AND SEXING

The male is larger, has a tall, erect tail crest and a large, coloured dewlap, while the female has a lower crest and a smaller dewlap. Young males resemble females, and the crest and dewlap develop with age. The age at sexual maturity has not been documented for the species; related anoles mature within the first year. Lifespan has not been documented for the species; other anoles live 4-8 years in captivity.

MATING

The male approaches the female with bobs, push-ups and an extended dewlap. If the female is receptive, she answers with bobs, and the male bites her on the neck during mating. The female rejects an unwelcome male by fleeing. In the wild the species breeds all year, but with fewer eggs in cold and dry periods. One male and two to three females can be kept together in a large enclosure with many hiding places and branches, but the male must be removed if he chases the females incessantly.

EGG-LAYING AND CLUTCHES

The female lays one egg at a time, rarely two, at intervals of about two weeks. She buries the egg in moist, loose soil or under wood and stones and covers it. Several females like to use the same nest site. Provide a tray with at least 5 cm of moist, loose soil or coconut fibre in the enclosure. The egg is small and soft-shelled, and she may lay in plant pots.

INCUBATION

Move the eggs carefully, keeping the same side up, to a closed container of slightly moist vermiculite. At 26-28 °C, incubation takes about 50 days. Check weekly that the substrate is moist and that no eggs are going mouldy.

REARING THE YOUNG

The young are about 5 cm long at hatching. They need micro feeders such as flightless fruit flies and newly hatched crickets daily, dusted with calcium and vitamins, and daily misted leaves so they can drink. Keep the young in an enclosure furnished like the adults', but smaller, and separate the males as soon as the sex can be seen, so they do not fight.

Health and common mistakes

Most problems are caused by errors in the setup. The typical ones are:

- Metabolic bone disease from too little UVB or too little calcium.
- Dry or retained shed, especially on toes and tail, at too low humidity.
- Respiratory infections from poor ventilation or conditions that are too cool.
- Burns if the animal touches a lamp.
- Stress and fight injuries if several males are kept together.
- Parasites in newly acquired animals, especially wild-caught ones; new animals are kept in quarantine.

See a vet if the animal does not eat for more than a week, is lethargic, has mucus discharge from the mouth, nose or eyes, or has swellings or sores.

Read more: Common diseases and signs of illness

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.