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GECKOS

Yucatan banded gecko

Coleonyx elegans

A slender, nocturnal ground gecko from the forests of southern Mexico, Guatemala and Belize, with black, angular bands on a beige background and movable eyelids. It is related to *Eublepharis macularius*, but smaller and slighter, feeds on small insects and likes it warm, with a humid hide.

Family: Eublepharidae Former name: *Coleonyx coleonyx; Gymnodactylus scapularis*

KEY FACTS

THE ANIMAL

Adult size	**13-18 cm** total length incl. tail
Lifespan	**8-12 years**
Active	**At night**
Lifestyle	**Terrestrial**
Habitat	**Dry forest and rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 45 × 30 cm** L × W × H for 1 adult
Temperature, day	**24-28 °C**
Basking spot	**29-32 °C**
Temperature, night	**20-23 °C**
Humidity	**50-60%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**11-12 months**
Clutch size	**1-2 eggs**
Incubation	**40-60 days** at 26-29 °C

PROTECTION AND PAPERWORK

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

About the species

Coleonyx elegans belongs to the eyelid geckos, like *Eublepharis macularius*. It has movable eyelids and can therefore blink, which most other geckos cannot. There are no adhesive lamellae under the toes, so the species lives on the ground and climbs only low. Scattered small tubercles between the fine dorsal scales are characteristic of the large species in the genus.

The juveniles are orange-red with beige and black bands and spots. With age the base colour becomes more beige, and the black bands acquire sharp, dark edges and changing shapes. The species name elegans means exquisite and alludes to the pattern.

The species was described by John Edward Gray in 1845 from animals from Belize. It is slender and reaches about 13-18 cm with the tail, and the largest measured snout-to-vent length is 120 mm. The hatchlings are only 3-4 cm at hatching. The tail stores fat and can be shed if the animal gets frightened. It grows back, but never looks quite the same as before.

The taxonomy has changed recently: the western form, formerly called *Coleonyx elegans nemoralis*, was made a separate species in 2022. Older records may therefore cover both forms. Captive-bred animals are not common, and in Europe the species is rarely seen in the trade.

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

Distribution and habitat

The species lives in southern Mexico and onwards south to northern Guatemala and Belize. The species is known from the states of Veracruz, Oaxaca, Tabasco, Yucatán, Chiapas and Quintana Roo and also from Nayarit on the Pacific coast, but the western records probably belong to the split-off species. The type locality is Belize, then British Honduras.

The species has also been reported from Honduras and El Salvador, but this is not confirmed, and the countries are therefore not included on the map. The outline on the map is rough and covers the Yucatán Peninsula and the nearest parts of Mexico and Guatemala.

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

HABITAT

The gecko is common in both forest and open country on the Yucatán Peninsula. It belongs in tropical, humid deciduous forest, where it lives in the leaf litter on the forest floor, but it is also found in drier, stony areas, up to about 1,000 metres above sea level.

During the day it hides under stones and bark or digs itself in, and at night it hunts small invertebrates on the ground. The species prefers about 24 °C. There are only a few measurements of temperature and humidity at the sites where it lives, so the enclosure values are based on experience from captivity.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

One adult animal needs an enclosure of at least 60 × 45 × 30 cm (length × width × height), and bigger is better. The floor area matters far more than the height, because the species lives on the ground. Two to three animals need more floor space than one animal.

The substrate should be diggable and preferably hold on to a little moisture, for example coconut fibre mixed with sand. Keep it slightly damp to dry, never wet. Furnish with more hides than there are animals: cork bark, flat stones, upturned plant saucers and small caves. Heavy stones must stand directly on the floor of the enclosure and not on top of the substrate, so that they do not topple when the gecko digs.

Always provide a humid hide, for example a small box with damp coconut fibre and a hole in the side. Ventilation should be good enough that the enclosure dries out a few hours after misting. Do not use dried sphagnum in the hides: swallowed moss fibres can cause fatal constipation.

TEMPERATURE

Keep 24-28 °C during the day and 20-23 °C at night, with a warm area of 29-32 °C at one end, so that the animal can choose for itself. The night temperature is an estimate.

The heat can come from a lamp or from a heat mat under part of the floor and must be controlled by a thermostat. Small enclosures quickly become too hot, so measure both at the warm spot and at the cool end, preferably with an infrared thermometer. A cool winter break can kick-start breeding (see mating).

Read more: Heat and temperature

HUMIDITY AND WATER

Keep the humidity at 50-60 % and instead create a humid microclimate in the hide and in part of the substrate. Mist 3-4 times a week, so that part of the substrate becomes damp and droplets form on the glass for the gecko to drink from. The terrarium should be dry again after a few hours.

Also provide a shallow dish of fresh water. It is not strictly necessary when you mist regularly, but it does no harm. The species comes from a more humid climate than its desert-dwelling relatives and must not be kept completely dry, but not in stagnant, wet surroundings either. An animal that lacks water gets wrinkled skin and sunken eyes.

LIGHTING AND UVB

The species is nocturnal and does not need any special lighting. Timer-controlled light for 10-12 hours or daylight from the room gives a fixed daily rhythm. It should be dark at night.

UVB is not necessary when the insects are dusted with calcium and vitamin D3, and it has not been investigated whether the species benefits from it. If you want to provide it, use a weak tube for shade-dwellers over a small part of the terrarium, so the animal can always retreat completely from the light. Avoid strong spotlights and coloured night lights.

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

FEEDING

The gecko feeds on insects and other small invertebrates. Dubia roaches or crickets are suitable as a staple, and small mealworms, soldier fly larvae and wax moth larvae provide variety. The feeder insect should be no longer than the distance between the animal's eyes, i.e. about 3 mm for newly hatched juveniles and 6 mm for adults.

Feed the feeder insects a good diet before they are used, and dust them with calcium and vitamins. Preferably put a small dish of pure calcium powder in the terrarium. Juveniles are fed daily or every other day, adults a couple of times a week. Watch the body shape: the tail should be plump, but not fat. A feeding dish the insects cannot climb out of prevents them from hiding in the substrate, and many animals learn to take food from tweezers.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

The gecko is shy and active at night. Wild-caught animals are often nervous and easily shed the tail, while captive-bred animals can get used to the keeper and in time tolerate gentle handling. The species is small and fragile, so hold it low over a soft surface, and never take hold of the tail.

Males are aggressive towards each other and must not live together. One male can be kept with one or more females, and females can usually live together if there is space and many hides. The animals can share a resting place without fighting, but separate them if you see bites or stress. It is perfectly normal for the animal to be hidden all day, so do not dig it out to see it.

Breeding

SEXUAL MATURITY AND SEXING

The sex is easy to see in adult animals: the male has a bulge at the base of the tail and distinct pores in front of the vent, between the hind legs. The female lacks both. Females breed for the first time at 11-12 months of age. Still, wait until the female is fully grown and in good condition before she is put to breeding.

MATING

A winter break of a couple of months without heating is recommended to get breeding going. For example, switch off the heat for about eight weeks, and let the animals rest at 17-19 °C without food. Then put the male with the female for one to two weeks, and take him out again. Females of the genus can store sperm, so one mating can last for several clutches.

The male probably bites the female on the neck during mating, as in *Coleonyx variegatus*. Keep an eye on them the first few nights.

EGG-LAYING AND CLUTCHES

The female lays eggs in pairs, more rarely a single one, and buries them in the substrate or lays them in the humid hide, if there is one. There can be several clutches a year, but there are no reliable figures from captivity, so the number is not in the fact box.

Provide the female with a humid hide or a laying box with damp vermiculite or coconut fibre. The eggs should be removed and incubated, otherwise they dry out or get dug up. Give the female extra calcium and insects throughout the season.

INCUBATION

Lay the eggs half sunk into damp vermiculite in a small container with a couple of ventilation holes, without turning them. Add water from the side so that the eggs do not get wet. The container stands in a small incubator or on a thermostat-controlled heat mat.

Incubate at 26-29 °C and at least 80 % humidity. The eggs hatch after 40-60 days. The figures are borrowed from *Coleonyx variegatus*, and as in that species the sex is probably determined by sex chromosomes and not by temperature.

Read more: Incubating eggs

REARING THE YOUNG

The young are only 3-4 cm at hatching. They eat for the first time after the first shed, when they are 5-8 days old. Give them micro crickets and other very small insects, dusted with calcium and vitamin D3, and keep them on paper towel with a small humid hide.

Keep them singly or in small groups of the same size, and separate them if one is bitten or chased. The small size makes both handling and feeding difficult, and the loss of eggs and young is the greatest challenge in breeding the genus. Weigh the young regularly so that you can follow their growth.

Health and common mistakes

The species is regarded as hardy, but there is little veterinary experience with it. The typical problems are:

- Dehydration, if the enclosure is too dry and the animal has no humid hide. The skin becomes wrinkled and the eyes sink in.
- Constipation, if the animal swallows loose substrate. Dry sphagnum fibres can cause fatal constipation. Use an even, slightly damp substrate.
- Calcium deficiency, if the insects are not dusted, especially in juveniles and breeding females.
- Overheating in small enclosures with a heat source. Measure the temperature in several places.
- A lost tail through handling or fighting. It grows back, but looks different. A very thin tail can be a sign of hunger or disease.
- Bites and stress, if males are kept together or there are too few hides.

A healthy animal has clear eyes and a plump tail. Seek a veterinarian with experience in reptiles if the animal loses weight, will not eat for several weeks or lies limp.

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.