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GECKOS

Wiegmann's striped gecko

Gonatodes vittatus

A small, diurnal gecko from Venezuela, Colombia and the islands off the coast, where the male has a white stripe with a black edge down the back and a yellow head. It climbs on tree trunks and walls but cannot climb glass, and it does well in a small enclosure if kept alone or as a pair.

Family: Sphaerodactylidae Former name: *Gymnodactylus vittatus; Gonatodes gillii*

KEY FACTS

THE ANIMAL

Adult size	**7-8 cm** total length incl. tail
Lifespan	**10-20 years**
Active	**By day**
Lifestyle	**Arboreal and terrestrial**
Habitat	**Dry forest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**30 × 30 × 30 cm** L × W × H for 2 adults
Temperature, day	**24-27 °C**
Basking spot	**29-32 °C**
Temperature, night	**20-24 °C**
Humidity	**50-60%**
UVB	**Optional**
Diet	**Insects and small invertebrates (springtails, fruit flies)**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1 eggs**
Incubation	**65-110 days** at 25-30 °C

PROTECTION AND PAPERWORK

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

About the species

Gonatodes vittatus is a small, diurnal gecko with round pupils and only slightly widened toes. It lacks the large adhesive lamellae that many other geckos have and therefore cannot climb smooth glass. Adults are about 7-8 cm including the tail. The body alone is about 3 cm long, and the tail is slightly longer than the body.

The sexes are very different. The male is greyish brown with a white stripe from the snout along the back and out onto the tail. The stripe has a black edge, and the head and the front part of the stripe are yellow. The female is greyish brown or brownish with a more subdued white stripe without the black edge. Juveniles are grey to brown with light spots. The stripe begins to show in males when they are about three months old.

The species was described in 1856, then in the genus *Gymnodactylus*. The scientific species name *vittatus* is Latin and means "banded" or "with a band", and the name refers to the male's dorsal stripe. The genus *Gonatodes* today belongs to the family Sphaerodactylidae. The chromosomes vary between populations, which suggests that the species may conceal several cryptic species.

Lifespan in captivity is estimated at 10-20 years, but this has not been documented. In the wild, animals of at least 3 years are known.

The skin is delicate. If an animal is grabbed, the skin can be torn. That is a good reason not to handle it. On the other hand, the species is bold and easy to observe by day, when it sits on a trunk or a rock head down, waiting for prey.

Distribution and habitat

Gonatodes vittatus lives in northern South America and on islands in the Caribbean. It is found in Venezuela, especially along the north coast and on the islands of Margarita, Coche and La Tortuga and on Los Roques, in northern Colombia and in Guyana. It is also found on Trinidad and Tobago and on Aruba and Curaçao.

The type localities lie on Venezuela's north coast at La Guaira, Puerto Cabello and Caracas. On Trinidad the species is widespread and common. It has also been found on Tobago, including in the north-eastern part of the island.

> **Native range:** Colombia, Venezuela, Guyana, Trinidad & Tobago, Aruba and Curaçao.

HABITAT

The species is associated with dry tropical and subtropical forest and forest edges, but it also lives close to people. On Trinidad it sits on tree trunks at the forest edge, on masonry and on and in wooden houses, and it can also be found in gardens and urban areas. It has been found from sea level up to about 1,100 metres.

The gecko is diurnal, but it does not bask. It is only rarely seen in direct sun and is most visible in the shade. Activity follows the air temperature: early in the morning at 23-26 °C only a few animals are seen, and they often only poke their heads out of a crevice. When the air reaches 26-31 °C most are out, and in the evening activity falls again. It is warm all year round. On Trinidad the daily maximum in May and June is about 31-32 °C and the night minimum about 24 °C, and eggs are laid all year. The animals use fixed hiding places behind loose bark or in crevices in walls, and both males and females defend their territory. At night most sleep in hiding, but a few sleep openly on the wall.

Care

THE ENCLOSURE

A pair needs an enclosure of at least 30 × 30 × 30 cm (length × width × height), and larger is better, because more space gives more calm. The species never uses the ceiling and does not climb on glass, so it is the floor area and the vertical surfaces inside the enclosure that count. The males are territorial, and females can also go for each other, so keep the species alone or as a single pair.

For substrate, coco fibre or a mix of sand and soil works, preferably bioactive with springtails and small isopods. The substrate should be slightly moist. Cover it with a layer of leaf litter, and add cork, bark, stones and twigs for the animals to climb on, and many hides at different heights. Live plants give extra hiding places and humid microclimates. The gecko likes to sit vertically with its head pointing down, so offer rough surfaces and a textured back wall.

The young are very small, so fine mesh and all gaps must be checked before they go into the enclosure. Although the species does not dig, it is small enough to be crushed, so heavy stones and roots must stand on the floor of the enclosure and not merely rest on the substrate. Ventilation must be good enough for the enclosure to dry out again within a few hours.

Read more: Terrarium construction and bioactive substrate Read more: Feeder animals: keeping and breeding

TEMPERATURE

By day the enclosure should be 24-27 °C. A warm spot of 29-32 °C can be made with a heat mat or a lamp, but it is not necessary if the temperature is otherwise high and stable. At night it should not fall below 20 °C, and in the wild the nights stay at about 24 °C.

The gecko is active in the warmest part of the day, and in the wild activity depends more on air temperature than on light. An enclosure that is too cool therefore produces an animal that hides. Use digital thermometers both at the top and at the bottom, and measure the warm spot with an infrared thermometer.

Read more: Heat and temperature

HUMIDITY AND WATER

Gonatodes vittatus thrives in drier air than most tropical geckos. Keep the humidity at 50-60 %. Mist the enclosure lightly every day or every other day, so that water droplets form on plants, leaf litter and walls for the animals to drink from. The enclosure should dry out within a few hours, otherwise the ventilation is too poor.

A shallow water bowl can stand in the enclosure, but it is not necessary when misting regularly. A humid hide or live plants provide the damp spots that are important during shedding. A hygrometer shows whether the humidity stays within the range.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is diurnal but does not bask, and UVB is optional. Weak UV light can make it easier to get the animals to breed, but too much UV can cause problems with shedding. If you use UVB, choose a weak bulb (a 2.0 or 5.0 bulb) and provide plenty of shade, because the animals do not bask. Without UVB it is important that the food is dusted with vitamin D3.

Lighting is best controlled by a timer, and at night it must be dark.

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

FEEDING

Gonatodes vittatus eats insects and other small arthropods. Young animals can take prey the size of pinheads: newly hatched crickets (up to about 3 mm), fruit flies (*Drosophila melanogaster*), springtails and small white isopods. Adults get crickets of about 6 mm as a staple and can also have small black soldier fly larvae, fruit flies (both *D. melanogaster* and *D. hydei*), small isopods and bean weevils. Feeder insects must be well fed before they are given and dusted with vitamin and mineral supplement, for example calcium with vitamin D3.

Young are fed daily and adults every other day. Watch the base of the tail and the body shape, and adjust the amount accordingly. The species is greedy and reacts quickly to movement. A feeding dish is not necessary, but it can keep the crickets in one place. Insects that hatch in the enclosure are a good extra food source.

BEHAVIOUR AND HANDLING

The species is bold and curious and is often seen during the day, but it is not an animal to be handled. The skin can tear if the animal is grabbed, and the animals are easily stressed. Enjoy it from the other side of the glass instead.

The males are territorial and can bite and tear the skin off each other. A male introduced to established animals can have large pieces of skin torn off. Females can also be aggressive towards each other. The animals also show threats with body posture and a waving tail. A pair can live together for a long time if there are many hides. Young that stay with the adults are killed. The animal prefers to sit vertically with its head pointing down, waiting for prey, so an enclosure with trunks and stone walls suits its behaviour.

Breeding

SEXUAL MATURITY AND SEXING

The sexes can be distinguished visually when the animals are about three months old. The male gets a yellow head and a bold white stripe with a black edge, and his spotted pattern turns into a uniform grey body. The female keeps her spots and her grey and brown colours, and her stripe becomes fainter and without the black edge. When the animals reach sexual maturity has not been documented for the species, so wait until both animals are fully grown before putting them together.

MATING

Breeding can be triggered by giving the animals a light winter rest or by lengthening the day in summer. Put an adult male together with a female in an enclosure with many hiding places and keep watch for the first few days. The male is territorial, so the female must be able to get away, and if the female is chased hard, the animals should be separated. A pair can be kept together for a long time. Ensure good nutrition for the female, especially calcium, while she is laying eggs.

EGG-LAYING AND CLUTCHES

The female lays one egg at a time, not several in a clutch, and in the wild eggs are laid all year round. In captivity the female lays an egg about every three weeks. The eggs are small, and the female lays them in a safe place, for example in a small egg-laying tube. Offer several safe and hidden places.

The eggs must be removed carefully and placed in incubation. The female should have plenty of calcium and small insects throughout the season. Stop breeding if she loses weight.

Read more: Incubating eggs

INCUBATION

The eggs are incubated at 25-30 °C and hatch after 65-110 days, longest at the low temperature. The temperature is borrowed from the related dwarf geckos of the genus *Sphaerodactylus*. Place the eggs in a small box with moist perlite or vermiculite or on a dry substrate, without turning them. The box must have small air holes. The surrounding humidity normally supplies the moisture the eggs need, but water must not touch them directly. Remove only eggs that are clearly dead.

REARING THE YOUNG

The hatchlings are only about 3 cm long when they hatch, and as they are very small, all crevices and mesh must be checked so that they do not escape. Move them to a small faunarium or a small enclosure with leaf litter, hides and a slightly damp substrate. The adults must not stay in the enclosure, as they kill the hatchlings.

Give them the smallest feeder insects: fruit flies, springtails, small isopods and newly hatched crickets, dusted with calcium and D3. Keep the hatchlings singly or in small groups of the same size and separate them if fighting occurs. After about three months the sex shows, and then males must be kept apart.

Health and common mistakes

Gonatodes vittatus is a small and delicate species, and most problems are caused by husbandry mistakes or stress. The typical mistakes are:

- Shedding problems. Animals can die during or just after a shed, especially if the shed drags on over several days. Provide humid hides and suitable humidity, and avoid disturbing the animal during the shed.
- Fights between males or between females, causing torn skin and sometimes death. Keep the animals alone or as a single pair, and separate them if there is unrest.
- Damaged skin from handling. The skin can tear off if the animal is grabbed.
- Escape. The young are very small and slip through small gaps, so check mesh, doors and cable holes.
- Crushed animals. Heavy objects must stand stably on the floor of the enclosure.
- A setup that is too cold or too wet. Keep the day at 24-27 °C and the humidity at 50-60 %, and let the enclosure dry out between mistings.

A healthy animal is active during the day, has a plump tail base and clear eyes. See a vet experienced with reptiles if the animal loses weight, does not eat or sits listlessly.

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.