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GECKOS

Barbour's least gecko

Sphaerodactylus torrei

A small, diurnal gecko from south-eastern Cuba with a marked difference between the sexes: the male has a yellow head and a bright orange tail, while the female is pale with dark crossbands. *Sphaerodactylus torrei* grows to only about 8 cm including the tail, lays one egg at a time and needs small feeder insects and a tightly closed enclosure.

Family: Sphaerodactylidae

KEY FACTS

THE ANIMAL

Adult size	**8 cm** total length incl. tail
Lifespan	**5-10 years**
Active	**By day**
Lifestyle	**Arboreal and terrestrial**
Habitat	**Rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 45 × 45 cm** L × W × H for 2 adults
Temperature, day	**26-28 °C**
Basking spot	**31-32 °C**
Temperature, night	**18-24 °C**
Humidity	**60-80%**
Water	**Water dish**
UVB	**Recommended** Ferguson zone 1
Diet	**Insects and small invertebrates (springtails, fruit flies)**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1 eggs**
Clutches per year	**1-4**
Incubation	**80-90 days** at 26-28 °C

PROTECTION AND PAPERWORK

CITES	**Appendix III**
EU annex	**Annex C**
IUCN	**Endangered (EN)**

About the species

Sphaerodactylus torrei is a small gecko in the family Sphaerodactylidae, and it occurs only in Cuba. The species was described in 1914 by Thomas Barbour. The scientific species name honours Carlos de la Torre y la Huerta (1858-1950), regarded as the foremost Cuban naturalist of his generation. There are two subspecies: the nominate one, which lives around Santiago de Cuba, and *S. t. spielmani*, which lives farther east towards Guantánamo.

It grows to about 8 cm including the tail, and the tail makes up about half. The sexes look very different. The male has a yellow to orange head, a silvery grey body with a slight sheen and a bright orange-red tail. The female is pale beige with 10-11 dark crossbands across the body and a pale underside. The young resemble the female and acquire the male's colours only at about 10 months of age, so the sex cannot be determined early.

The gecko is diurnal with round pupils and is most active early in the morning and late in the afternoon. It is territorial and aggressive towards conspecifics. In the wild a single tree typically holds only one pair and a few young, and population density is therefore low. The species is rare in captivity because it reproduces slowly. Lifespan is not documented; the 5-10

years in the fact box is an estimate.

Distribution and habitat

Sphaerodactylus torrei is endemic to Cuba and occurs only in the south-eastern part of the island. The nominate subspecies lives from Santiago de Cuba east to Playa Juraguá and inland to Dos Bocas. *S. t. spielmani* lives from the Hatibonico River to Guantánamo Bay in Guantánamo Province.

The range is small, and the species is red-listed as threatened. A few records on the map outside south-eastern Cuba do not fit the known range and are probably misidentifications.

> **Native range:** Cuba.

HABITAT

Sphaerodactylus torrei lives in humid forest. The animals are found under rotting wood, under stones and in bark crevices, and occasionally they sit on tree trunks up to about 2 metres above the ground. Among dead leaves and fallen wood they find both shelter and small prey such as crickets, moths, flies and beetle larvae.

The climate in the area is warm and humid, with more than 1,000 mm of rain a year. From May to October it is warm and humid, with about 31-32 °C by day and about 24 °C at night. From November to April it is cooler and drier, with about 26 °C by day and down to 18 °C at night. This seasonal rhythm can be imitated in the enclosure if the animals are to breed.

Read more: Feeder animals: keeping and breeding

Care

THE ENCLOSURE

A pair of *Sphaerodactylus torrei* can be kept in an enclosure of 60 × 45 × 45 cm (length × width × height). A single animal will manage in somewhat less. The animals are territorial, so keep either one animal or one pair. Even an enclosure over 150 cm long is not big enough for two pairs, and two males must never be housed together.

Set it up as a humid tropical forest with a layer of leaves on top of the substrate, cork panels on the back wall and cork tubes, branches, stones and live plants, so there are plenty of hiding places and levels to use. The substrate can be a slightly damp mix of sand, peat and fine cork pieces. Plants hold the moisture and create small zones with different microclimates.

The animals are small and look for a way out, so the lid must be of fine mesh and fit tightly. Ventilation must be good, so the moisture does not linger and cause mould.

TEMPERATURE

By day the temperature should be 26-28 °C, and a small area may reach 31-32 °C in the summer half of the year. At night the temperature falls to about 24 °C. For a cool winter period the night can be lowered to about 18 °C.

If the room already has the right temperature, extra heat is unnecessary. Otherwise a small bulb of about 15 W above the mesh lid or a weak heat mat on the side may be enough. Beware of overheating in such a small enclosure, and always measure with a digital thermometer at both the warm and the cool end, so that the animals can choose for themselves.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity should be 60-80%. Mist the enclosure daily so that the humidity reaches 70-80%, and let the air dry out a little between mistings. Half of the substrate should be slightly damp, and the rest should be allowed to dry.

The animals prefer to drink droplets from leaves and cork after misting. You can also put out a very small, shallow water dish, such as a bottle cap, that the young cannot drown in, and change the water daily.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Sphaerodactylus torrei is diurnal, and weak UVB lighting in Ferguson zone 1 is recommended. Use a low-output UVB tube over one half of the enclosure, so there is always shade. Keep the light on for 10-12 hours a day, longest in summer, preferably controlled by a timer. The night must be dark.

Read more: Lighting and UVB

FEEDING

Sphaerodactylus torrei feeds on small, live prey. In the wild it is small crickets, moths, flies and beetle larvae, and in captivity small crickets, fruit flies, small wax moth larvae and small black soldier fly larvae are suitable. Prey must not be wider than the animal's head. Adults are fed 2-3 times a week. The metabolism is high, so watch the body condition to keep the animals neither too thin nor too fat. A small dish of small mealworms can also be left out all the time.

Dust the food with calcium and a multivitamin at every feeding, and gut-load the feeder insects with nutritious food before they are served. Offer live prey, because the animals respond to movement and take dead insects poorly. The food can be placed directly in the enclosure or in a shallow dish, but take care that it does not escape.

Young animals need even smaller prey such as springtails, fruit flies and newly hatched crickets. This is often the biggest challenge, because small food must be available at all times.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Sphaerodactylus torrei is territorial and aggressive, so it is kept singly or as one pair with plenty of hiding places and space. The animals are small and fast and become stressed easily by handling, so they are animals to watch, not to pick up. If there is too little cover they become shy and hide. With leaf litter, cork and plants they are active and curious by day. Care itself is regarded as easy, but the species is rare in captivity because it reproduces slowly, and the small feeder insects require a steady supply.

Breeding

SEXUAL MATURITY AND SEXING

The sex is seen first from the colours. The male has a yellow to orange head and an orange-red tail, while the female is beige with dark crossbands. The young resemble the female, and the males acquire colours only after about 10 months. This makes sexing difficult early on, so make sure you get a confirmed pair, and never house two animals of the same sex together. When the animals are ready for breeding is not documented.

MATING

Breeding typically takes place in summer, which corresponds to the warm and humid rainy season in the animals' homeland. Imitate it by keeping the enclosure warm and humid, and mist twice a day for several weeks, so that about half of the substrate is damp. The male and female should be put together in a large enclosure with many hiding places, and for the first few days they must be kept under observation, because the animals are aggressive. There is little experience with the species, and much of what is known about breeding comes from related species in the genus.

EGG-LAYING AND CLUTCHES

The female lays one egg at a time, in good condition about every fourth week, but at most around four eggs a year, mostly in summer. The eggs are hidden in hollow tubes, bark or under cover. Dried, hollow stems of Japanese knotweed make good egg-laying sites. If the female lacks suitable sites, her breeding success falls. Give her plenty of food and calcium throughout the season, because egg-laying takes a toll on her strength.

INCUBATION

Carefully move the egg to an incubator once it has been laid, so that it is not lost or does not become too damp in the enclosure. The temperature should be 26-28 °C, and the egg hatches after about 80-90 days.

Read more: Incubating eggs

REARING THE YOUNG

Keep each juvenile separately in a small container with peat, a single hiding place and a very shallow water dish. Offer springtails, fruit flies, small crickets or wax moth larvae. The young are very small, and the food must not be too large, so they do not choke. The males acquire their sex colours only after about 10 months.

Health and common mistakes

There is almost no documented knowledge of diseases in *Sphaerodactylus torrei*, so the advice is based on experience with small geckos in general. The typical mistakes are:

- Too little calcium and vitamins, which causes brittle bones. Dust the food at every feeding.
- A constantly wet substrate and poor ventilation, which cause mould and skin problems.
- Overheating in a small enclosure. Measure the temperature, and provide a cool zone.
- Undernourishment or excess weight. The animals have a high metabolism, so assess the body condition regularly.
- Fights between animals that do not suit each other. Separate them immediately.
- Escape through loose mesh or gaps.

See a vet with experience in reptiles if the animal loses weight, stops eating or looks listless.

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.