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GECKOS

Black-spotted least gecko

Sphaerodactylus nigropunctatus

A diurnal dwarf gecko from the Bahamas and Cuba, measuring 3-4 cm from snout to vent. The sexes look very different: females have dark crossbands on a pale background, while males are spotted and can glow yellow to orange. The species is divided into many subspecies, and almost every island group has its own form.

Family: Sphaerodactylidae

KEY FACTS

THE ANIMAL

Adult size	**3-4 cm** snout-vent length
Lifespan	**10-20 years**
Active	**By day**
Lifestyle	**Terrestrial**
Habitat	**Dry forest and rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**20 × 20 × 30 cm** L × W × H for 2 adults
Temperature, day	**24-28 °C**
Basking spot	**29-32 °C**
Temperature, night	**18-22 °C**
Humidity	**60-70%**
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**
Incubation	**80-90 days** at 24-28 °C

PROTECTION AND PAPERWORK

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

About the species

Sphaerodactylus nigropunctatus is one of the larger dwarf geckos. Adults measure 3-4 cm from snout to vent, and including the tail they reach 6-7 cm. The largest subspecies, *S. n. strategus* from south-eastern Cuba, reaches 40 mm from snout to vent, while the other forms grow to no more than 37 mm. The species name is Latin and means black-spotted.

The sexes are easy to tell apart. Females and juveniles have three to four dark crossbands across the body on a pale grey to brownish background, dark markings on the head and a tail banded in black and white. Males lose the bands and are brown to yellowish with black spots; in several forms they glow yellow to orange. Adhesive lamellae under the toes allow the gecko to climb glass.

The species is divided into eleven subspecies, including *S. n. flavicauda*, *S. n. decoratus*, *S. n. gibbus*, *S. n. granti*, *S. n. strategus* and *S. n. ocujal*. They differ in colour, pattern and size and are hard to tell apart. Several of them were described under the name *Sphaerodactylus decoratus*, which is now regarded as part of this species. Animals intended for breeding should therefore always come with information on subspecies and collection locality.

Distribution and habitat

Sphaerodactylus nigropunctatus lives in the Bahamas and Cuba. In the Bahamas it occurs on the Great Bahama Bank, including Andros, the Bimini Islands, the Berry Islands, New Providence, Eleuthera and the Exuma Islands, and also on Long Island, Cat Island, Little San Salvador, Rum Cay, Ragged Island and the Cay Sal Bank.

In Cuba it occurs on the cays of the Sabana-Camagüey Archipelago, in the Sierra de Cubitas and from north-eastern Camagüey through Holguín and Granma to Guantánamo, also along the south-eastern coast. Almost every island group and region has its own subspecies, and several of them grade into one another where their ranges meet.

> **Native range:** Bahamas and Cuba.

HABITAT

Sphaerodactylus nigropunctatus lives in the lowlands on limestone islands with a tropical climate. In the Bahamas it is found mainly in leaf litter and fallen palm fronds in the coastal scrub behind the dunes, in coastal limestone scrub and dry scrub, under stones in the shade and in stone piles inland. In Cuba it lives both in dry regions, where it seeks out damp and shaded spots, and in humid forest, for example in rotting trunks.

The species prefers shade and a humid microclimate, even where the surrounding landscape is dry. It is active by day and moves mostly on the ground among leaf litter, stones and hiding places. The climate is warm all year, with a rainy season in summer and a drier, slightly cooler winter.

Care

THE ENCLOSURE

Little is known about the care of *Sphaerodactylus nigropunctatus*. The species is kept and bred in small enclosures like other dwarf geckos, but the figures for temperature, humidity, incubation and lifespan are borrowed from the better-known *Sphaerodactylus elegans*. *Sphaerodactylus torrei* from the same part of Cuba has the same requirements.

A pair can be kept in an enclosure measuring 20 × 20 × 30 cm (length × width × height). A larger enclosure, for example 30 × 30 × 30 cm, gives room for more microclimates and more leaf litter. The gecko lives on the ground, so floor area matters more than height.

The substrate is the most important part: coir mixed with soil free of fertiliser and a little sand, covered with a layer of dry leaves, for example oak, beech or Indian almond. A bioactive substrate with springtails and small woodlice keeps the substrate clean and provides extra food. Add cork bark, cork tubes, flat stones and twigs, and plant small climbing plants such as pothos or creeping fig, so that there are many hiding places and different microclimates. Heavy stones must sit directly on the base, so the animal cannot be crushed if it crawls in underneath them.

The lid must be made of fine mesh and fit tightly, because both the geckos and the small feeder insects escape through even small gaps. A fully open mesh lid dries the enclosure out too quickly, while a fully closed lid causes mould; a smaller mesh panel is a good compromise.

Read more: Humidity, misting and ventilation Read more: Terrarium construction and bioactive substrate Read more: Feeder animals: keeping and breeding Read more: Incubating eggs

TEMPERATURE

Keep *Sphaerodactylus nigropunctatus* at 24-28 °C by day, and let the temperature fall to 18-22 °C at night. A small warm spot of 29-32 °C under a weak lamp with a thermostat can be provided, but it is not necessary, and the animal must always be able to retreat into a cooler and more humid layer of leaf litter.

In most homes no extra heat is needed in summer. In winter a weak heat mat on the side of the enclosure, controlled by a thermostat, may be enough. Never heat the whole floor, as this dries out the leaf layer. Measure the temperature with a digital thermometer down at the substrate and not only in the air. An animal that stays out in the open during the warmest hours is too hot or too dry.

Read more: Heat and temperature

HUMIDITY AND WATER

Keep the humidity at 60-70%. Mist the enclosure every day, morning or evening, so that there are droplets on leaves and glass for the animals to drink from. Down in the leaf litter the substrate must stay damp all the time but never wet, and the surface should dry out within a few hours, otherwise mould will develop.

A very shallow water dish, preferably filled with small pebbles, can be left out. A deep dish is a drowning trap for such a small animal. A hygrometer shows whether the humidity holds.

LIGHTING AND UVB

The gecko is diurnal, but stays in the shade and in the leaf layer. Keep the light on for about 12 hours in summer and 10-11 hours in winter, and keep the night dark. If there are live plants, an LED plant lamp is needed. Avoid spotlights, which heat and dry out the enclosure.

The need for UVB has not been studied for *Sphaerodactylus nigropunctatus*. As the animal lives in the shade, Ferguson zone 1 is appropriate: a weak UVB tube for shade-dwelling species over one end of the enclosure and plenty of hiding places, so that the animal can choose for itself.

Read more: Lighting and UVB

FEEDING

The animals are insectivores and take only very small prey. Juveniles should be given springtails, small fruit flies (*Drosophila melanogaster*), newly hatched crickets and small woodlice. Adults take crickets of 3-6 mm, large fruit flies (*Drosophila hydei*), small woodlice and small black soldier fly larvae. Feeder insects must not be larger than the animal's head.

Feed young animals every day and adults every other day, as much as they eat within a few minutes. Alternate between several kinds of food. Dust the feeder insects with calcium at every feeding and with a multivitamin powder with D3 every second or third time. Obtaining enough small food can be more difficult than looking after the animals themselves, so make sure there is a steady supply of springtails and small crickets before the animals move in.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Keep *Sphaerodactylus nigropunctatus* singly or as a pair. Males must not be housed together, because they fight, and in several dwarf geckos females are also incompatible. Separate the animals at any sign of fighting.

The gecko is fast and shy and spends much of its time in the leaf litter, so it can be hard to spot. It is too small and fragile to be handled and can escape through even small openings. Move it by letting it crawl into a small container, and work calmly when you touch the substrate.

Breeding

SEXUAL MATURITY AND SEXING

The sexes are easy to tell apart as adults: females keep the dark crossbands from their juvenile stage, while males become spotted and often yellow to orange. The age at sexual maturity is not documented. Wait until the animals are fully grown and have acquired adult colours before pairing them for breeding.

MATING

A well-fed pair in an enclosure with many hiding places normally breeds without special help. Mating behaviour and seasonal rhythm are not documented for *Sphaerodactylus nigropunctatus*. Shorten the day length a little in winter; this fits the drier and slightly cooler winter in the species' range. Make sure the female is not chased, and separate the animals if she is bitten.

EGG-LAYING AND CLUTCHES

The female lays one egg at a time, as is typical of the genus, and repeats this at intervals of a few weeks when she is well fed. The egg is small, white and hard-shelled and is laid in the substrate, in the leaf litter, under bark or in hollow stems. Dry stems of Japanese knotweed, stood up against the wall, are often used.

The eggs can be hard to find. In several dwarf geckos the adults do not chase the young, but this is not documented for *Sphaerodactylus nigropunctatus*, so it is better to move the eggs to an incubator.

INCUBATION

The egg hatches after about 80-90 days at 24-28 °C. Move it in the same position as it lies to a small box with air holes and a slightly damp substrate such as vermiculite or perlite, and keep the air in the box humid so the egg does not dry out. The shell is hard, and the egg must not lie wet. The newly hatched young are very small and dry out easily, so they must be moved straight to a humid rearing box.

REARING THE YOUNG

The newly hatched young are very small and have the same banded pattern as the females. Rear the young in a small, tight box, for example a plastic box of about 1 litre with small air holes, set up in the same way as the adults' enclosure: damp coir, leaf litter, hiding places and a small plant. Mist daily. The first food is springtails and the smallest fruit flies, which must be available all the time. In some dwarf geckos the young can live together in small groups, but this is not documented for this species, so it is better to keep them separately, and separate them at once if unrest arises.

Health and common mistakes

Most problems are caused by incorrect conditions. The typical mistakes are:

- An enclosure that is too dry. The body is so small that the animal dries out quickly. Lethargy, sunken eyes and wrinkled skin are signs of dehydration.
- An enclosure that is too damp without air exchange, which causes mould and skin problems.
- Too little calcium and vitamin D3, especially in young animals and in females that lay eggs.
- Feeder insects that are too large, or only one kind of food.
- Heavy items the animal can be crushed under.
- Fights between adult animals. Separate them in case of bites or injuries.

A healthy animal is active, has clear eyes and a plump tail. The animal is too small to treat yourself. Contact a vet with experience in reptiles if the gecko loses weight, does not eat or sits lethargically out in the open all day.

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.