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GECKOS

Ashy gecko

Sphaerodactylus elegans

One of the largest species among the dwarf geckos, yet still only 7-8 cm long. *Sphaerodactylus elegans* is diurnal, climbs on glass and changes appearance as it grows: the young have black crossbands on a yellow body and an orange tail, while the adults are a subdued reddish brown with a fine pattern of pale dots.

Family: Sphaerodactylidae Former name: *Sphaerodactylus alopex; Sphaerodactylus punctatissimus*

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	**Rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**30 × 30 × 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 2
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 elegans is a dwarf gecko that as an adult grows to only 7-8 cm including the tail; in the Cuban subspecies the largest measure up to about 4 cm from snout to vent. The young hatch at about 3 cm and are very striking: the head is pale, the body yellow with heavy black crossbands, and the tail glows orange to red. Adults look completely different, reddish brown with a dense pattern of beige dots and irregular streaks. Males and females resemble each other in colour and pattern, so the sex is not easy to see.

Under the toes there are adhesive lamellae, so the gecko can climb glass, and therefore the enclosure must be completely tight, not least when there are small young. The species was described in 1834 and is divided into two subspecies: *S. e. elegans* on Cuba and *S. e. punctatissimus* on Hispaniola. The latter is more subdued in colour and more speckled. The species name is Latin and means tasteful or fine, presumably referring to colours or body shape, while the subspecies name comes from Latin *punctatus*, spotted.

S. elegans and *S. cinereus* were formerly regarded as young and adults of the same species, but have since been kept apart. The species has been introduced to the southernmost part of Florida, where it has formed populations. Lifespan in captivity is probably 10-20 years.

Distribution and habitat

Sphaerodactylus elegans lives in western and central Cuba and on Isla de la Juventud as well as the small coral islands around Cuba. On Hispaniola it occurs in both Haiti and the Dominican Republic, also on the nearby islands of Gonâve and Les Cayemites. Cuba and Hispaniola each have their own subspecies.

The species has also been introduced to a few small islands in southernmost Florida, including Key West, where it was first seen in 1922. It probably arrived with ship cargo from the West Indies and has not spread far since. These populations are not included on the map.

> **Native range:** Cuba, Haiti and Dominican Republic.

HABITAT

Sphaerodactylus elegans lives in the tropical Caribbean, on Cuba with the surrounding island groups and on Hispaniola. The precise habitat type, the altitude and the climate of the species' habitats are not documented. What is known is that the species is diurnal and lives mostly on the ground among leaf litter and hiding places, but often climbs and sits higher up.

In captivity it thrives in humid, tropical air over a substrate that is moist but not wet, so it presumably lives in places with leaf litter, hiding places and stable humidity. The biotope in the fact box is therefore an estimate.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

A pair needs an enclosure of at least 30 × 30 × 30 cm (length × width × height). Larger is better, especially if the enclosure is to hold live plants, lighting and a warm spot, and a large enclosure gives room for several microclimates.

Hides are important: put a layer of leaf litter on the bottom, and place cork bark, cork tubes and twigs at different heights. Live plants such as pothos, philodendron and ferns retain moisture. Although the species does not dig, it is so small that it can be crushed, so heavy stones and pieces of wood must stand directly on the bottom of the enclosure and not on top of the substrate layer. Cover the back and side walls, so the animal feels secure.

Coconut fibre works as substrate, preferably mixed with unfertilised soil and a little sand. A layer of 7 cm or more helps keep the moisture stable. A bioactive substrate with springtails and small, soil-dwelling woodlice provides extra food and less cleaning. The enclosure needs good ventilation, and all gaps must be closed, because the young are so small.

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

TEMPERATURE

By day the temperature should be 24-28 °C with a small warm spot of 29-32 °C under a weak bulb with a thermostat. The cool side must not exceed 28 °C, so choose a low-wattage heat source. At night the temperature may fall to 18-22 °C, but never below 18 °C. Measure the temperature with a digital thermometer, both at the warm spot and on the cool side.

Read more: Heat and temperature

HUMIDITY AND WATER

The species needs more moisture than many other dwarf geckos. The humidity should be about 60-70 %. Spray the enclosure once or twice a day so that there are water droplets on leaves and panes for the gecko to drink. Good ventilation is still important: the enclosure should dry out within a few hours, otherwise mould develops.

A shallow water bowl can be put out, but is not necessary if you spray regularly. Use a digital hygrometer with the sensor on the cool side. Keep the substrate moist but not wet.

LIGHTING AND UVB

The gecko is diurnal and benefits from plenty of light. Keep the light on for about 12 hours a day, preferably a little shorter in winter. If there are live plants, an LED plant lamp is also needed.

The species can probably manage without UVB if it gets vitamin D3 in the calcium supplement, but a weak UVB source is recommended. Use a UVB tube for shade-dwelling animals, e.g. a 7 % T5 tube, and leave plenty of shade, so the animal can choose for itself. The UV index at the warmest spot should be low, no more than 2-3 (Ferguson zone 2).

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

FEEDING

The gecko is an insectivore. Small animals mean small prey: young need newly hatched crickets, fruit flies (*Drosophila melanogaster*), springtails and small woodlice. Adults take crickets of about 6 mm, large fruit flies (*Drosophila hydei*), small black soldier fly larvae, bean beetles and small woodlice. The feeder animals should not be larger than the gecko's head.

Young animals can be fed every day and adults every second day. Give the number they eat in about five minutes. Alternate between at least three kinds of food. Dust the feeder animals with calcium at every feeding and with a multivitamin powder containing vitamins A and D3 at every second to third feeding. Feed the feeder animals nutritious food a couple of days before use. A small dish can keep the food together but is not necessary.

It can be more difficult to obtain enough small feeder animals than to keep the gecko itself. Make sure you have a stable supply of springtails and small crickets before acquiring the animal.

BEHAVIOUR AND HANDLING

The species is best kept singly or as a pair. Males must never be put together, because they fight. Groups of females of the same size in a roomy enclosure often work well, but not always, so be ready to separate the animals at signs of fighting. A pair will breed.

S. elegans is active and curious and moves both on the floor and high up. It is too small and fragile to be handled, so do so only when necessary. Move it by letting it crawl up into a small container.

Breeding

SEXUAL MATURITY AND SEXING

Males and females are almost identical in colour and pattern, so it is harder to sex them than in many other dwarf geckos. Males can normally be recognised by pale scales along the underside of the hind thighs. When the animals reach sexual maturity is not documented.

MATING

A mild winter rest or longer days in summer are recommended to get breeding going. If a pair is kept in an enclosure with plenty of space, they mate without special help. Mating behaviour and the length of the rest period are not documented for the species. In other species in the genus the female lays regularly when she gets plenty of food.

EGG-LAYING AND CLUTCHES

The female lays one egg at a time, about every third week, in a sheltered place. Small egg-laying tubes or hollow twigs help; otherwise the egg is laid in the substrate, in the leaves or behind cork bark. The eggs are so small that they can be hard to find. Give the female plenty of food and calcium while she is laying.

The eggs are carefully removed and placed in a small container for incubation. In some related species the adults do not hunt the young, and there the eggs can stay in the enclosure, but this is not documented for *S. elegans*.

Read more: Incubating eggs

INCUBATION

The eggs hatch after about 80-90 days. The temperature during incubation is not documented for the species; the fact box's 24-28 °C is borrowed from the daytime temperature of the enclosure. Place the eggs in a small container with air holes and a moist medium such as perlite or vermiculite, and do not turn them, as with other geckos.

REARING THE YOUNG

The young hatch at about 3 cm. They are reared in a small container, for example a plastic box of about 1 litre, furnished like the adults' enclosure: moist coconut fibre, leaves, hides and a small plant. Make sure to seal all gaps, because the young climb on glass.

Give them springtails, newly hatched crickets, fruit flies and small woodlice every day. Obtaining enough food this small is the greatest challenge. Young of some species in the genus can be kept together, but not all tolerate it. In *S. elegans* this is not documented, so keep them singly if in doubt.

Health and common mistakes

Sphaerodactylus elegans is hardy and regarded as easy to keep, but there is little documented information on diseases. The typical mistakes are:

- Too little calcium and vitamin D3, especially in young animals and egg-laying females. Dust the feeder animals and provide a weak UVB light.
- An enclosure that is too dry or too wet. The species is thin-skinned and needs moisture, but constantly wet conditions cause mould and skin problems.
- A one-sided diet. Alternate between several kinds of feeder animals.
- Heavy items that the animal can be crushed under. Support them against the floor.
- Fights between adult animals. Separate them in cases of bites or injuries.

A healthy animal is active, has clear eyes and a plump tail. See a vet with experience in reptiles if the animal loses weight, does not eat or seems lethargic.

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.