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GECKOS

European leaf-toed gecko

Euleptes europaea

A small, nocturnal gecko from cliffs and islets in the western Mediterranean. It spends the day in narrow rock crevices, tolerates cool nights and is the only species in its genus. Little is known about its care in captivity.

Family: Sphaerodactylidae Former name: *Phyllodactylus europaeus; Phyllodactylus doriae*

KEY FACTS

THE ANIMAL

Adult size	**6-8 cm** total length incl. tail
Weight	**1.2 g**
Lifespan	**6-21 years**
Active	**At night**
Lifestyle	**Rock-dwelling**
Habitat	**Rocky terrain**
Difficulty	**Experienced**

CARE

Min. enclosure	**30 × 30 × 30 cm** L × W × H for 2 adults
Temperature, day	**22-26 °C**
Basking spot	**28-30 °C**
Temperature, night	**16-20 °C**
Humidity	**50-70%**
UVB	**Optional**
Winter rest	**10-15 °C** 8-12 weeks
Diet	**Insects and small invertebrates (springtails, fruit flies)**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**24-36 months**
Clutch size	**1-2 eggs**
Clutches per year	**1-3**
Incubation	**65-80 days** at 24-28 °C

PROTECTION AND PAPERWORK

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

About the species

Euleptes europaea is a small, compact gecko. Adults measure on average 38 mm from snout to vent and weigh about 1.2 g, and including the tail they reach 6-8 cm. Size varies a great deal between populations, and on some islets the animals are unusually large or small. The head is broad and flat, the eyes are large with a vertical pupil, the body is plump and the legs are short.

The skin is smooth to slightly granular and without the tubercles that characterise the other European geckos. The colour is greyish brown to yellowish brown with paler and darker blotches, often arranged in cross-bands, and the animal is paler in warmth and darker in cold. The toes are square with expanded adhesive pads at the tip, so that they resemble small leaves. The tail is about as long as the body, and a regenerated tail becomes distinctly thicker than the original. Almost all adults have a regenerated tail.

The species was described in 1839 by Giuseppe Gené from Sardinia under the name *Phyllodactylus europaeus*. Today it is the only living species in the genus *Euleptes* in the family Sphaerodactylidae. The genus name comes from Greek and means something like truly slender.

Distribution and habitat

Euleptes europaea lives in the western Mediterranean. It occurs on Corsica and Sardinia and on many small islands around them, on the islands off Marseille and Hyères, on the Lérins Islands and in a few places on the coast of south-eastern France, in Liguria and in Tuscany with the Tuscan islands. To the south it occurs on the Galite Islands off Tunisia. It has disappeared from two small Tunisian islands.

The range is fragmented and to a large extent tied to islands, and many populations live on small rocky islets of a few hundred square metres.

> **Native range:** Italy, France and Tunisia.

HABITAT

Euleptes europaea lives on cliffs, rock faces, scree, slopes and old walls, often on granite, and is also seen under loose bark on trees. By day it lies in very narrow crevices, only 2-4 mm wide, where both back and belly are in contact with the stone, and the same crevices are used for egg-laying. It is most often found low down near the coast, but lives up to 1,000-1,500 m above sea level. It avoids houses with people, but ruins are readily used.

The climate is Mediterranean with hot, dry summers and mild, damp winters. The animals are active at night and exploit the warmth of the rocks: by day they can lie near the surface of the sun-warmed stone. On the coast the species does not enter true hibernation but is less active in the coldest months, and adults are seldom out when the air and the stone are below 10 °C. In winter the animals gather in communal hides, up to several dozen together.

Read more: Brumation and the seasons

Care

THE ENCLOSURE

Little is known about the care of *Euleptes europaea*. The care described here is based on the species' habitat and the Mediterranean climate. *Tarentola mauritanica* and *Hemidactylus turcicus* live in the same area and the same climate and are better known in captivity, but they are larger and not closely related.

A pair can live in an enclosure of 30 × 30 × 30 cm (length × width × height). The gecko climbs on vertical surfaces, so the height is used. Build a back wall and a couple of stacks of slate, stone or cork with narrow, vertical crevices of 3-5 mm and some slightly wider ones, so that the animal can squeeze in with contact on both sides. The stacks must stand firmly so that they cannot slip, and some of the crevices must be able to be taken apart so that eggs can be found. A substrate of sand and gravel and a few dry branches or a piece of bark complete the setup.

The enclosure must be completely secure, because the animals are small and quick, and have good ventilation so that the air does not become damp and stagnant.

TEMPERATURE

Keep 22-26 °C by day and a small warm spot of 28-30 °C, for example a stone slab under a weak lamp or above a heat mat with a thermostat, so that the animal can warm itself in a crevice as on sun-warmed rocks. At night the temperature may fall to 16-20 °C. The figures are an estimate based on the climate; the species tolerates cool nights better than high heat.

In winter the climate on the Mediterranean coasts corresponds to a cool period of 10-15 °C. Lower the temperature and the photoperiod slowly over a couple of weeks, keep the animals cool for 8-12 weeks, and then raise the temperature slowly again. Keep fresh water available at all times. Measure with digital thermometers both at the warm spot and at the cool end.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be 50-70 %, an estimate based on the Mediterranean climate. Keep most of the enclosure dry, and leave a single crevice or a corner slightly damper. Mist lightly every second or third evening, so that the animal can lick droplets from stones and glass, and let the surfaces dry out again. The enclosure must not be constantly damp. A shallow water dish can be left out, but deep dishes are a drowning trap for so small an animal.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is nocturnal, and its need for UVB has not been investigated. By day, however, the animal lies near the surface of sun-warmed stones, so a weak UVB tube for shade dwellers can be used as an option if there are plenty of hides. Keep a fixed daily rhythm with about 12-14 hours of light in summer and shorter days in winter, and keep it dark at night.

Read more: Lighting and UVB

FEEDING

In the wild *Euleptes europaea* lives on small insects and spiders, both flying and ground-dwelling, and it stalks its prey slowly like a cat before pouncing. Give small feeder insects such as fruit flies, small crickets, small roaches, springtails and small woodlice. The prey must not be larger than the animal's head.

Feed in the evening, when the animal becomes active: adults two to three times a week and juveniles every day. Dust the feeder insects with calcium at every feeding and with a vitamin powder with D3 every second or third time. Do not feed during the cool winter period.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Euleptes europaea is shy, hides most of the day and becomes active after dark. It is quick, can jump a long way for its size and is unsuited to handling, and it readily sheds its tail.

In the wild the species lives densely and gathers in communal hides in winter, but how well adults tolerate one another in an enclosure is not documented. Keep the animals singly or as a pair with only one male, give them many crevices, and separate animals that fight or are kept away from the food.

Breeding

SEXUAL MATURITY AND SEXING

The animals grow steadily for the first two years and reach sexual maturity in the third year. The sexes resemble each other and are difficult to tell apart. Adult males are recognised by a swelling at the base of the tail, where the hemipenes lie. In gravid females the eggs can be seen through the thin skin of the belly.

MATING

In the wild mating takes place in late winter and early spring, and it is eased by the animals gathering in communal winter hides. Mating is violent: the animals bite each other's tails, so that the tail is often shed. A cool winter period followed by rising temperatures and longer days corresponds to the natural cycle. How the species breeds in enclosures is not documented.

EGG-LAYING AND CLUTCHES

The female normally lays two eggs at a time and glues them to the stone inside a narrow crevice. In the wild most females are gravid from April to mid-July, and egg-laying lasts from mid-May to the end of July. The female lays 1-2 clutches a year, sometimes 3; in higher mountain areas only one. The eggs are hard-shelled, about 8 mm and tolerate desiccation well.

Provide the female with several narrow crevices of slate or cork that can be taken out without the eggs having to be loosened, and give plenty of calcium.

INCUBATION

In the wild the eggs hatch 65-80 days after laying, from the beginning of August to the beginning of October. The temperature in the enclosure is not documented; 24-28 °C is an estimate. The eggs are stuck fast and must not be broken loose. Move the whole stone or piece of cork with the eggs to a small, ventilated box, and keep the air slightly damp. The eggs must not lie wet.

REARING THE YOUNG

The newly hatched young measure about 17 mm from snout to vent, about 3 cm including the tail, and weigh about 0.25 g. They grow quickly in the first month. Move them away from the adults to a small box with narrow hides of slate or bark, and give them springtails and small fruit flies every day. Rearing in captivity is not documented in detail.

Health and common mistakes

No particular diseases are documented in *Euleptes europaea*. The most likely problems are the same as in other small geckos:

- Calcium deficiency, especially in egg-laying females. Give calcium at every feeding.
- Temperatures that are too high. The species is used to cool nights and tolerates heat worse than many other geckos.
- Stagnant damp air, which causes mould and skin problems.
- Loss of the tail if the animal is grabbed or bitten. The tail grows back, but becomes thicker.
- Stress if there are not enough narrow crevices to hide in.

In the wild the animals live 6-8 years, and in captivity they can live up to 21 years. Find a veterinarian with experience of reptiles if the animal loses weight, stops eating outside the winter period 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.