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LACERTIDS

Italian Wall Lizard

Podarcis siculus

Podarcis siculus is a robust, fast, diurnal lizard that basks on rocks, walls and ruins in Italy and along the Adriatic. It reaches 15-25 cm including the tail and feeds on insects and some plant matter. The species needs sun, UVB, a large enclosure with rock structure and a cold brumation, and it does best with an outdoor enclosure in summer.

Family: Lacertidae

KEY FACTS

THE ANIMAL

Adult size	**15-25 cm** total length incl. tail
Weight	**5-15 g**
Lifespan	**5-8 years**
Active	**By day**
Lifestyle	**Rock-dwelling and terrestrial**
Habitat	**Rocky terrain and temperate woodland and meadow**
Difficulty	**Intermediate**

CARE

Min. enclosure	**120 × 50 × 50 cm** L × W × H for 2 adults
Temperature, day	**24-32 °C**
Basking spot	**40-50 °C**
Temperature, night	**14-18 °C**
Humidity	**40-60%**
Water	**Water dish**
UVB	**Recommended** Ferguson zone 3
Winter rest	**5-10 °C** 8-12 weeks
Diet	**Insects, plants and small invertebrates (springtails, fruit flies)**
Kept	**In pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**10-14 months**
Clutch size	**2-12 eggs**
Clutches per year	**2-3**
Incubation	**35-50 days** at 25-30 °C

PROTECTION AND PAPERWORK

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

About the species

Podarcis siculus is a sturdily built lizard with a long, pointed tail and a relatively large head. The body (snout to vent) reaches up to about 9 cm, and with the tail adults are typically 15-25 cm. The largest weigh about 15 g. The males are larger than the females and have a broader head and stronger jaws. The females' body length averages about 6 cm. The young are about 3 cm in body length at hatching. Animals from northern populations and from islands are on average smaller than animals from the Italian mainland.

The colour varies greatly. The upper side is green, greenish brown or brown, often with a dark reticulated pattern or longitudinal bands, and the underside is white, cream or faintly greenish. Some island populations are almost black or bluish. In the males the colours are stronger than in the females. The species resembles *Podarcis muralis* and can be confused with it, but it is more strongly built and typically has a greener upper side.

The taxonomy is complicated. Several dozen subspecies and local forms have been described, and many of them are known only from small islands. Animals from different areas should therefore not be mixed. The genus name comes from the Greek for "swift-footed", and the species name refers to Sicily.

The temperament is lively, shy and curious. The animals flee at great speed, shed the tail when caught and get used to people only slowly.

Distribution and habitat

Podarcis siculus is one of the commonest lizards in Italy and is found over most of the mainland and on Sicily and many smaller islands. In the north it reaches southern Switzerland and southern France, and along the Adriatic it is found in Slovenia, Croatia, Bosnia and Herzegovina and Montenegro and on many islands. The species disappears above about 1,000 m.

The species has been introduced in many places, including Spain, Corsica and Menorca, Turkey, southern England and the eastern part of the USA. These populations are not part of the native range and are not shown on the map.

> **Native range:** Italy, France, Switzerland, Slovenia, Croatia, Bosnia & Herzegovina and Montenegro.

HABITAT

Podarcis siculus is a true generalist and is found in woodland clearings, grassland, scrub, vineyards, rocky terrain, fields and in towns and gardens with walls and ruins. It follows human settlement more than most lizards and is often numerous where there are stone walls, railway embankments and masonry. It prefers open, sunny places and is clearly heat-loving: active animals have a body temperature of about 30-36 °C, on average about 33 °C.

The species is diurnal and basks in the morning on rocks and walls. The climate is Mediterranean to temperate with hot, dry summers and mild to cold winters. The animals are active from early spring to autumn and overwinter in crevices, caves and under stones. Humidity is moderate: the stones dry quickly, and the animals seek shade and moister crevices when the heat is greatest. The females bury the eggs in loose soil and sand.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

A small glass enclosure is too small for *Podarcis siculus*. A pair needs at least 120 × 50 × 50 cm (length × width × height), and a male with several females more. The species is larger and more active than *Podarcis muralis*. Better still is an outdoor enclosure or a mesh cage in a sunny garden from May to September, where the animals get natural light and natural temperature swings. It must be completely escape-proof (fine wire mesh, covered, with a buried edge) and have both shade and hides, so that the animals do not overheat.

The enclosure must be longer than it is tall and full of vertical and sloping surfaces: stacked slate slabs, cork, roots and a rock background with crevices the animals can hide in. All hides must be able to dry out. The substrate is a mixture of sand and a little soil, so that the animals can dig, and plants such as heather, herbs and ivy give cover. Ventilation must be ample, preferably from both bottom and top. The males are territorial and bite each other, so keep only one male per enclosure. Egg-laying females need a deep, slightly moist sand substrate of at least 10 cm to dig in.

TEMPERATURE

The gradient is the most important thing. The basking spot must be 40-50 °C at the surface, measured with an infrared thermometer, and the rest of the enclosure 24-32 °C by day. This allows the animals to reach the body temperature of 30-36 °C they maintain in the wild. Use a spotlight over a flat stone or a piece of cork, and let the animals choose between sun and shade.

At night the temperature must fall to 14-18 °C. In summer, when the animals are outdoors, they naturally follow the weather, and that is an advantage. Strong sun can produce over 40 °C in a closed cage, so shade and ventilation are necessary. Warning signs are animals that gape, lie flat with the mouth open or hide all day (too hot), and animals that do not come out until late morning (too cold).

Brumation takes place at 5-10 °C and is described under breeding.

Read more: Heat and temperature Read more: Brumation and the seasons

HUMIDITY AND WATER

Humidity must be moderate: 40-60 % by day, and higher (up to 70-80 %) at night, when the animals sleep in hiding. The enclosure must dry out completely during the day. A persistently damp enclosure causes skin problems and fungal infections, while a completely dry one causes shedding problems.

The animals drink droplets from plants and stones, so mist lightly with water once a day, early, so that everything is dry by evening. Also provide a shallow water dish, which is kept clean. Egg-laying females and young need a moister corner, so give part of the substrate a little moisture without making the whole enclosure damp.

Read more: Common diseases and signs of illness

LIGHTING AND UVB

Podarcis siculus is diurnal and a true sun-lover. The enclosure needs a powerful heat spot and UVB light. The UVB lamp must give Ferguson zone 3 (UV index about 3-5 at the basking spot) and be placed over the basking spot, and a daylight tube or an LED lamp lights up the rest of the enclosure. The lamp is mounted so that the animals cannot come closer to it than the manufacturer's instructions allow.

Day length is 12-14 hours in summer and 8-10 hours in the transitional months, and in October the lighting is reduced before brumation. Day length and temperature control the species' annual cycle, and in captivity the animals keep their natural rhythm as long as light and temperature follow the seasons. Replace UVB tubes according to the manufacturer's instructions, typically every year. A summer stay outdoors provides natural UV light, but glass and acrylic block UVB, so sunbathing must take place through mesh and not through panes.

Read more: Lighting and UVB

FEEDING

Podarcis siculus is omnivorous with the emphasis on animal food. The food is mainly small live insects and other small animals: crickets, grasshoppers, flies, fruit flies, spiders, woodlice, snails and worms, and mealworms in small amounts. The animals also take plant parts and fruit, in some populations up to half of the food. Offer fine leaves, flowers, berries and small pieces of fruit or apple regularly alongside the feeder insects. The feeder insects must be small: at most the size of the distance between the animal's eyes.

Adults are fed every other day with as much as they eat in 10-15 minutes. Young are fed daily with very small animals such as fruit flies, small crickets and springtails. Dust the food lightly with calcium at most feedings and with a supplement containing D3 once every 1-2 weeks if the animals do not get sufficient UVB. Do not give wild-caught feeder animals if they may have been sprayed. Supplements are especially important for females in the egg-laying season and for growing young.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements Read more: Buying animals: captive-bred, wild-caught and transport

BEHAVIOUR AND HANDLING

Podarcis siculus is fast, shy and territorial. The males mark territory with body language and scent trails, and two males in the same enclosure fight until the weaker one is stressed, loses weight or gets bite injuries. Keep one male with two to four females in a large enclosure, or a pair. The females tolerate each other if there are plenty of hides and basking spots.

The animals should not be picked up. They flee, shed the tail under stress or capture, and the tail only partly regrows with a different structure. If an animal has to be moved, it is caught in a transparent container and not by hand. A large, well-furnished enclosure with many hides makes the animals more visible, because they feel safe, and they get used to feeding from tweezers. The species is an animal for observation. Signs of stress are constant hiding, repeated attempts to escape against the glass and loss of appetite.

Breeding

SEXUAL MATURITY AND SEXING

The sex is easy to see in adults: the males have a broader head, stronger jaws, larger femoral pores and stronger colours, while the females are slimmer and more uniform. In the males the tail base is thicker because of the hemipenes. Young cannot be sexed with certainty.

The animals become sexually mature at an age of 10-14 months. Breeding should wait until the female has reached full size and is in good condition, so that she is not weakened by egg-laying.

MATING

Mating follows brumation. Day length and temperature control the whole cycle, so a cold brumation of 2-3 months at 5-10 °C is a prerequisite for mating and a good clutch; animals kept warm all winter often give poorer clutches. After brumation the animals are woken slowly over a couple of weeks with rising temperature and day length, and they must be fed generously before they mate. Brumation and incubation have not been documented for the species, so the figures for both are borrowed from *Podarcis muralis* and adapted to a more southerly species.

Mating takes place from April to June. The male chases the female, bites her on the flank or at the tail and holds on during mating, which lasts a few minutes. The females must be able to withdraw, otherwise they become stressed. A male can mate with several females.

Read more: Incubating eggs

EGG-LAYING AND CLUTCHES

The female lays eggs from the end of April to mid-July in two to three rounds about 20 days apart, 12-20 eggs in all in the season. A single clutch holds 2-12 eggs, on average 4-7, and young, small females lay the fewest.

The female digs a hole in moist sand and covers the eggs. The enclosure must have a layer of at least 10 cm of slightly moist sand where the female can dig, and females that cannot find a suitable place may become egg-bound. Signs of egg binding are a female that is distinctly swollen, lethargic and not eating, and she must then see a vet.

INCUBATION

Carefully dig up the eggs and move them to a closed container with moist vermiculite or perlite (about 1:1 with water by weight). Mark the top of each egg, and do not turn the eggs. Keep the temperature at 25-30 °C. The humidity in the container must be high, but the eggs must not lie in water.

The eggs hatch after about 35-50 days, fastest at the high end of the temperature range. The eggs take up water and swell during incubation; this is a good sign.

REARING THE YOUNG

The young must be moved to an enclosure of their own, because the adults eat young. An enclosure of 40 × 30 × 30 cm with hides, a basking spot and UVB is suitable for the first few months, and young can be kept in groups of the same age. The substrate is moist at one end and dry at the other.

First foods are fruit flies, springtails and very small crickets, later small grasshoppers and woodlice. Feed daily, dust with calcium, and provide strong UVB light, so that metabolic bone disease does not develop. The young grow quickly and are almost adult after a year. In the first winter they should have only a short, mild brumation of 6-8 weeks, and only if they are in good condition.

Health and common mistakes

Most problems are caused by too little heat, too little UVB or an enclosure that is too damp. The typical problems are:

- Metabolic bone disease from too little UVB and calcium. The animals become lethargic and have soft jaws and deformed legs.
- Mites on the skin and in the corners of the eyes. Mites can be treated by a vet, and all new animals must be quarantined.
- Internal parasites, especially in wild-caught animals. A faecal sample at the vet reveals them.
- Egg binding in females that have no suitable place to lay eggs.
- Shedding problems and fungal infections from persistent damp.

- Bite injuries and loss of the tail from stress and fights between males.
- Injuries during brumation: a brumation that is too warm gives active, weakened animals, and one that is too cold gives frost damage.

If an animal does not eat for more than a week outside brumation, or if it is lethargic, swollen or has trouble using its legs, it must see a vet with reptile experience. Brumation is a strain, and only healthy animals in good condition may be brumated.

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.