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LACERTIDS

Dalmatian Wall Lizard

Podarcis melisellensis

Podarcis melisellensis is a small, compact, diurnal rock lizard from the coasts and islands of the Adriatic. It reaches 15-22 cm including the tail, has distinct pale stripes above the eyes, and the males occur with a yellow, orange or white belly and throat. The species is common in the wild, but little is known about its care.

Family: Lacertidae

KEY FACTS

THE ANIMAL

Adult size	**15-22 cm** total length incl. tail
Lifespan	**5-10 years**
Active	**By day**
Lifestyle	**Rock-dwelling and terrestrial**
Habitat	**Rocky terrain and temperate woodland and meadow**
Difficulty	**Intermediate**

CARE

Min. enclosure	**100 × 50 × 50 cm** L × W × H for 2 adults
Temperature, day	**22-30 °C**
Basking spot	**40-45 °C**
Temperature, night	**14-18 °C**
Humidity	**40-60%**
Water	**Water dish**
UVB	**Recommended** Ferguson zone 3
Winter rest	**8-12 °C** 8-12 weeks
Diet	**Insects and small invertebrates (springtails, fruit flies)**
Kept	**In pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**2-8 eggs**
Incubation	**35-45 days** at 26-28 °C

PROTECTION AND PAPERWORK

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

About the species

Podarcis melisellensis is a small, compact lizard with a shorter head than *Podarcis siculus* and an unspotted belly. The body (snout to vent) is at most about 65 mm in adults, and the tail is about twice as long as the body, so the animals are at most about 22 cm in total. The young are about 25 mm (snout to vent) at hatching.

The colour is most often brown, grey or green with varying patterns, and pale stripes above the eyes are usually distinct. On the islands size and colour vary greatly from population to population, and there are completely black populations.

Males have three colour types, with a yellow, orange or white belly and throat. Orange males are larger and have a harder bite than the others, and they usually win the fights over territories. Females prefer orange males, but also mate with yellow ones. White males only gain access to females by sneaking into other males' territories.

Many island forms and subspecies have been described, but at most two subspecies are recognised today. In the trade it is easily confused with other *Podarcis*, including *Podarcis muralis*, from which it is told apart by the unspotted belly and the pale lines above the eyes.

Distribution and habitat

Podarcis melisellensis lives along the eastern Adriatic coast: in Croatia (the coast and many islands, including Vis, Korčula, the Kornati Islands, Čiovo and Hvar), in Slovenia, in Montenegro, in north-western Albania and in Italy around Trieste. It is also found in Bosnia and Herzegovina. The map shows only the countries where the species is native, and the many small islands and skerries are too small to be seen on it.

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

HABITAT

Podarcis melisellensis lives in open, stony terrain: rock faces, limestone slopes, stone piles and stone walls, open woodland and Mediterranean-type scrub, and grassland. It is a strongly ground-dwelling species and basks on stones. The climate has warm, dry summers and mild, rainy winters.

The animals can be active all year, but reproduction is concentrated in spring and early summer. The females lay eggs. The diet is small prey, especially hard and medium-hard arthropods such as beetles, ants and spiders and other prey that is not fast. Plant material plays a smaller role in the diet than in *Podarcis siculus*. On small islands with little food the diet becomes more varied.

Care

THE ENCLOSURE

Little documented knowledge exists about the care of *Podarcis melisellensis*, so the figures for temperature, humidity, incubation time and lifespan are borrowed from the related *Podarcis muralis* and *Podarcis siculus*, which have the same way of life and a similar climate.

A pair needs at least 100 × 50 × 50 cm, and each additional female requires about 20 cm more in length. The species uses mainly the floor, but climbs on stones and bark, so the enclosure needs both floor area and vertical surfaces. An outdoor summer enclosure or mesh cage in a sunny garden from May to September is a clear advantage, with a covered section to keep the rain out. It must be escape-proof, with fine mesh, a tight lid and a buried edge, because the animals dig and are fast.

The substrate is a mixture of sand and a little soil or peat. Furnish with sun-exposed flat stones, bark, stacked slate slabs and hides, and with a container of vermiculite or moist sand for egg-laying. Keep one pair or one male with two or three females per enclosure. Two males of the same species will fight. The species is best kept alone, without other lizard species.

Read more: Humidity, misting and ventilation Read more: Incubating eggs

TEMPERATURE

By day it should be 22-30 °C, and the basking spot should be 40-45 °C at the surface, measured with an infrared thermometer. Use a spotlight over a flat stone, and heat only part of the enclosure so the animals can choose for themselves. At night the temperature falls to 14-18 °C.

In winter the animals are kept cooler, at 8-12 °C, for 8-12 weeks with a short day (about 4 hours of light), few feedings and a little moisture. The winter rest must take place cool, including at night: in a warm home the animals do not settle, the males stay coloured, and the females lay small or poor clutches. Frost must be avoided.

Animals that gape with an open mouth or lie flat and hide all day are too hot. Animals that only come out late in the morning are too cold.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be moderate: 40-60% by day. The enclosure must be able to dry out completely, because stagnant, humid air causes skin problems and fungus.

Provide a shallow, clean water dish. The species likes to drink from the dish, so it must never be left dry. Also mist lightly once a day, early, so that everything is dry by the evening, and keep one corner of the substrate slightly moist for females and juveniles. During the winter rest the substrate is kept slightly moist with weekly misting.

LIGHTING AND UVB

Podarcis melisellensis is diurnal and lives in open, sunlit terrain, so the enclosure needs strong heat and UVB light. The species belongs to Ferguson zone 3, with a UV index of around 3-5 at the basking spot. A T5 tube with 10% UVB, positioned according to the manufacturer's instructions, is a good solution. Supplement with daylight or LED over the rest of the enclosure.

Day length follows the seasons: only about 4 hours during the winter rest, then slowly increasing to 16-18 hours in the breeding season in spring and 12-14 hours for the rest of the summer. Glass blocks UVB, so basking outdoors must take place through mesh. Replace the UVB tube according to the manufacturer's instructions, typically every year.

Read more: Lighting and UVB

FEEDING

Podarcis melisellensis eats small arthropods. Feeder insects can be crickets, small locusts, flies, fruit flies, springtails, spiders and woodlice. Mealworms and waxworms are given only in small amounts. The food must be small, at most the size of the distance between the animal's eyes. Crickets dusted with calcium and vitamins make a good staple.

Adults are fed every other day with as much as they eat in 10-15 minutes. Juveniles are fed daily with very small animals. Dust the food lightly with calcium at most feedings and with a D3 supplement once every 1-2 weeks, the amount according to the product's instructions. Females that lay eggs have a large calcium requirement, so a dish of crushed cuttlebone should be available.

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

BEHAVIOUR AND HANDLING

Podarcis melisellensis is fast and alert and flees when disturbed. Males are territorial, and two males of the same species together will fight, especially if one is orange. A pair or one male with two or three females is the safest way to keep them. Adults may eat juveniles, so juveniles are kept apart from the adults.

The animals should not be picked up. They drop the tail when stressed or caught, and it regrows, but changed. If an animal has to be moved, it is caught in a transparent container. Regular routines make them gradually more confident, but they rarely become tame. The species digs and climbs everywhere, so all vertical openings in the enclosure must be secured.

Breeding

SEXUAL MATURITY AND SEXING

Males are larger and sturdier and have a broader head and stronger colours than females. Males occur with a yellow, orange or white belly and throat, while females are more subdued. Juveniles cannot be sexed reliably.

Age at sexual maturity is not documented for *Podarcis melisellensis*.

MATING

Reproduction is tied to the season. After a cool winter rest the males are warmed up a week to ten days before the females, with a short day of about 4 hours of light and a warm night. When the females join them, the day length is slowly increased, and after 6-10 weeks the light is on for 16-18 hours. Males and females must be in the same rhythm: if they are not, the eggs are unfertilised or the clutches are small.

Do not move the animals outdoors too early in spring. If a cold period follows a couple of warm days, the animals think winter is coming again, and breed late in the summer. The female must be able to retreat into hiding during mating.

EGG-LAYING AND CLUTCHES

Females lay eggs in the breeding season. A clutch is 2-8 eggs, most often 2-3. The number of clutches per year is not documented for the species. The female digs a hole in moist sand or vermiculite and covers the eggs, so the enclosure should have a shallow container with at least 10 cm of slightly moist substrate. Check it daily in the season, because eggs that are not found easily dry out.

A female that does not find a suitable spot can become egg-bound. Signs are a clearly swollen, lethargic female that does not eat. She must then go to a vet.

INCUBATION

Dig the eggs up gently, and place them in a closed container with slightly moist vermiculite or perlite with small air holes. Mark the top of the eggs, and do not turn them. The eggs must not lie in water and must not dry out.

At 26-28 °C the eggs hatch after 35-45 days. Keep the temperature even with an incubator with a thermostat. Unfertilised eggs collapse and go mouldy, while fertilised eggs turn white and firm.

REARING THE YOUNG

The young are about 25 mm (snout to vent) at hatching and must go straight into an enclosure of their own, because the adults may eat them. An enclosure of about 50 × 30 × 30 cm with hides, a basking spot and UVB suits a clutch for the first months. Young of the same age can go together in small groups as long as there are plenty of hiding places.

First foods are fruit flies, springtails and very small crickets, later small locusts and woodlice. Feed daily, dust with calcium, and provide strong UVB light so that bone disease does not develop. Juveniles grow fast and must not go short of food.

Health and common mistakes

Little documented knowledge exists about diseases in the species. The typical problems are the same as in other *Podarcis*:

- Bone disease (metabolic bone disease) from too little UVB and calcium. The animals become lethargic and have soft jaws and deformed legs.
- Mouth rot (infection in the mouth), especially with stress and too low a temperature.
- Mites and ticks on the skin and in the corners of the eyes. New animals must be quarantined.
- Intestinal worms and other parasites, especially in wild-caught animals.
- Egg binding in females without a suitable place to lay.
- Shedding problems and fungal infections with persistent damp.
- Bite wounds and lost tails from stress and fighting between males.
- A disrupted breeding season and small clutches if the winter rest is skipped or takes place too warm.

If an animal does not eat for more than a week outside the cool period, is lethargic or swollen, or has difficulty using its legs, it must go to a vet with experience of reptiles.

Read more: Common diseases and signs of illness Read more: Buying animals: captive-bred, wild-caught and transport

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.