herpy

GECKOS

Common wonder gecko

Teratoscincus scincus

A gentle desert gecko from Central Asia and Iran with large, glassy eyes and a tail covered in large plates. When it feels threatened, it rubs the plates against each other so that it rattles like a little rattlesnake. It digs its own burrows in the sand and needs to be kept dry and given a cool winter rest in order to breed.

Family: Sphaerodactylidae Former name: *Stenodactylus scincus*

KEY FACTS

THE ANIMAL

Adult size	**16-20 cm** total length incl. tail
Lifespan	**10-20 years**
Active	**At night**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Desert and semi-desert**
Difficulty	**Intermediate**

CARE

Min. enclosure	**90 × 60 × 45 cm** L × W × H for 2 adults
Temperature, day	**24-28 °C**
Basking spot	**30-35 °C**
Temperature, night	**18-22 °C**
Humidity	**30-50%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**2 eggs**
Clutches per year	**1-5**
Incubation	**60-110 days** at 28-29 °C

PROTECTION AND PAPERWORK

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

About the species

Teratoscincus scincus is a sturdily built desert gecko with a broad head, large lidless eyes and a short, thick tail. Adults are sandy yellow to greyish brown with black, broken crossbands or blotches, while the flanks and belly are almost white. Newly hatched juveniles are bright yellow with dark crossbands. The skin is thin, and the large, soft scales overlap like roof tiles. They are easily rubbed off if the animal is handled too roughly.

The gecko lacks the adhesive toe pads that many other geckos have. Instead the toes have fringes of small scales that give good purchase in loose sand, so it does not climb on glass, but lives on the ground and in its burrows. Most distinctive is the tail, which is covered in large, stiff plates. If the animal is threatened, it rises up on stretched legs, arches its back and waves its tail so that the plates rattle. It can also squeak, hiss and lunge forward to bite. The tail can be shed and regrows, but rarely regains its old shape.

Hermann Schlegel described the species in 1858 as *Stenodactylus scincus*. Since then, forms that were previously regarded as subspecies have been split off as separate species, including *Teratoscincus keyserlingii* and *Teratoscincus rustamowi*. Older care sheets and animals in the trade may therefore go under different names. Adults grow to about 16 cm including the tail, with large animals reaching up to 20 cm. There are no reliable weight figures.

It is a calm animal, but fragile, and is better suited to watching than to handling.

Distribution and habitat

The species has a wide distribution in the desert belt from Iran to the far west of China. It is found in central and western Iran, western Afghanistan and northern Baluchistan in Pakistan, and onwards to the north through the deserts east of the Caspian Sea in Turkmenistan, Uzbekistan, Tajikistan and southern Kazakhstan. In China it lives in Xinjiang. The type locality is the Ili Valley on the border between China and Kazakhstan.

Older records from the Arabian Peninsula, including Qatar and Oman, are uncertain. The only well-documented population of the genus in Arabia, in the United Arab Emirates, belongs to the closely related *Teratoscincus keyserlingii*, so Arabia is not included on the map.

> **Native range:** Iran, Afghanistan, Pakistan, Turkmenistan, Uzbekistan, Kazakhstan, Tajikistan and China.

HABITAT

The gecko lives in deserts and semi-deserts: on sand dunes, gravel and clay plains and in dry riverbeds with sparse, low vegetation. By day it lies in a deep burrow that it digs itself. The burrow retains moisture and shields against both heat and cold. At night it comes out and hunts insects and other small animals, and it also takes smaller lizards.

The climate is continental and harsh, with dry, very hot summers and cold winters. In the northern parts of its range the animals hibernate and live off their fat reserves. It is precisely the cold winter that kicks off the breeding season, and it must be imitated if you want eggs in the enclosure.

Care

THE ENCLOSURE

A single animal or a pair needs an enclosure of at least 90 × 60 × 45 cm (length × width × height). For a small group it should be at least 100 × 60 × 60 cm. The animals walk around a great deal at night, so floor area matters most. Height is less important because the gecko does not climb, but the lid must fit tightly.

The substrate is the most important thing. Use a dry, diggable mixture of washed play sand and clay or desert soil that can hold a dug burrow, in a layer of 10-15 cm. Avoid calcium sand and other coloured or calcareous sand from the pet shop, because the animals may swallow it and become impacted. Make at least two hides from, for example, cork tubes and flat stones, one in the warm end and one in the cool end. Make one of them a damp hide with slightly moist soil, so that the animal can choose for itself. Place stones and hides directly on the floor of the enclosure before the sand goes in, so that they do not collapse when the animal digs beneath them.

Place a shallow bowl of fresh water in the cool end, and ensure good ventilation so that the enclosure does not become damp and mouldy.

Read more: Calcium, vitamins and supplements

TEMPERATURE

The species needs a clear temperature gradient. By day the cool end should be at 24-28 °C, and a warm area should reach 30-35 °C at the sand surface, for example under a heat bulb or a ceramic heater controlled by a thermostat. Measure the surface temperature with a digital thermometer or an infrared thermometer.

At night the temperature may fall to 18-22 °C, as in the wild, and extra heat is seldom needed. In a cold room, a heat mat under one end can keep the substrate warm without light.

If you want to breed, the animals need a winter rest of about two months at 15-18 °C. See the section on pairing.

Read more: Heat and temperature

HUMIDITY AND WATER

This is a desert species, and the enclosure should be dry, with a humidity of 30-50 %. Do not mist the whole enclosure. Instead, moisten the sand lightly in the cool end or in the damp hide a couple of times a week, so that the animal has somewhere to go when it needs to shed.

The skin sheds in pieces, and remnants may stay on the toes and tail tip if the air is too dry. If so, make the damp hide a little damper. The gecko drinks from a water bowl, which should be changed often.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

As a nocturnal animal, the gecko has no great requirements for light, and it can manage perfectly well without UVB as long as the food is dusted with vitamin D3. Alternatively, you can provide a weak UVB tube for shade-dwelling species (Ferguson zone 1-2), for example a 5-7 % T5 tube in the warm end, so that the UV index is at most 1-2 where the animal can reach. There must always be shade and hides in the rest of the enclosure. UVB is therefore listed as optional.

Keep a regular day-night rhythm with about 12 hours of light in summer and 10 hours in winter. The night should be dark.

Read more: Lighting and UVB

FEEDING

The gecko is an insectivore. Offer varied live food such as crickets, locusts and dubia roaches, and mealworms or waxworms as an occasional treat. The insects should be smaller than the distance between the animal's eyes and ideally gut-loaded with greens, so that they are nutritious themselves. Adults are fed 2-3 times a week, juveniles every other day.

Dust the insects with calcium at most feeds and with a vitamin powder containing D3 once a week. If the animal has UVB, less D3 can be given. Feed in the evening, and remove insects that are not eaten, so that they do not bother the animal. Keep an eye on its weight, because the species easily becomes overweight in captivity.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

The gecko is calm and wait-and-see, but fragile. The thin skin can be torn if you grip too hard, and the tail is easily shed. Handle it as little as possible, and never grab the tail. When it feels threatened, it rattles its tail, squeaks and may bite, but this is mostly bluff.

Males must never be kept together, because they fight. A pair can usually live together, but watch whether they tolerate each other. Adults may eat or attack juveniles, so juveniles should always have their own tub. Watch for bites, missing tails and poor appetite, and have a spare enclosure ready. The gecko sleeps in its burrow by day, so you will mostly see it in the evening.

Breeding

SEXUAL MATURITY AND SEXING

Males are recognised by the two bulges at the base of the tail, where the hemipenes sit, and by a row of pores in front of the vent. There are no reliable figures for when the species reaches sexual maturity. Females should be fully grown, in good condition and of stable weight before they are put to breed, because young females are easily drained of calcium.

MATING

The species needs a cool winter rest in order to breed. The rest typically lasts about two months at 15-18 °C, and without the rest breeding often fails to happen. Feed the animals well in the weeks before, so that they have reserves, but stop feeding two weeks before the temperature is lowered, so that the gut is empty. Weigh them along the way. Then raise the temperature slowly to normal, and begin cautiously to feed again.

When the animals are eating normally, the male is introduced to the female in her enclosure. Watch them for the first few nights, and separate them if the female is chased without respite or gets bite wounds.

EGG-LAYING AND CLUTCHES

The female lays two eggs at a time and up to five clutches during a season. The eggs are hard-shelled but fragile, and can be crushed when the female digs. Give her a laying site with deep, loose sand, for example 15 cm of sand over a heat mat in one end, where the eggs fall away from her. Check regularly for new eggs.

Keep an eye on the female's weight throughout the season, and give her plenty of calcium and food. Stop breeding if she loses weight.

INCUBATION

The eggs must be incubated dry or with very little moisture. Too much moisture kills the embryos, but completely dry air can also be a problem. Place them in dry sand or other dry substrate in a closed box with a small water dish that does not touch the eggs.

Incubate at 28-29 °C. Hatching time varies greatly, from about 60 to 110 days. Place the eggs half-buried in the substrate without turning them. It is not known whether temperature determines the sex.

REARING THE YOUNG

The young are bright yellow with dark crossbands. Remove them from the adults, who may attack them. Keep them singly in a small tub or an enclosure of 20-40 litres with sand, a dry and a damp hide, and lightly moisten a small part of the floor.

Offer small live insects such as small crickets and small roaches, dusted with calcium, every other day. Weigh them regularly. There are no reliable figures for growth and weight, so watch the animal's condition, for example a plump tail base, rather than age alone.

Health and common mistakes

The species is hardy when temperature and substrate are right. The typical problems are:

- Damp substrate and poor ventilation, which cause fungal infections, skin problems and respiratory infections. Keep the enclosure dry with only one small damp hide.
- Shed remnants on the toes and tail tip, especially if the air is too dry. A damp hide and lukewarm water help.
- Damage to the thin skin after rough handling. Pick the animal up rarely, and never by the tail.
- Impaction after swallowing calcium sand or other unsuitable substrate. Use washed sand and clay.
- Lack of calcium and vitamin D3, especially in juveniles and breeding females. This causes soft bones and tremors. Dust the food.
- Obesity from generous feeding of fatty insects.
- Poor appetite from too low a temperature or after the winter rest.

Seek a vet with experience in reptiles if the animal loses weight, does not eat for several weeks, has swollen eyes, wheezy breathing or is 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.