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SKINKS

Arabian Sand Skink

Scincus mitranus

A small, smooth, sand-coloured skink from the dunes of the Arabian Peninsula that swims through loose sand with undulating movements. *Scincus mitranus* spends most of its life a few centimetres below the surface, dives under at the slightest disturbance and needs a deep layer of clean sand, heat and dry conditions.

Family: Scincidae Former name: *Scincus muscatensis; Scincus arabicus; Scincus philbyi; Scincus richmondi; Scincus arenarius*

KEY FACTS

THE ANIMAL

Adult size	**15-20 cm** total length incl. tail
Lifespan	**10-18 years**
Active	**By day**
Lifestyle	**Burrowing**
Habitat	**Desert**
Difficulty	**Intermediate**

CARE

Min. enclosure	**80 × 50 × 30 cm** L × W × H for 2 adults
Temperature, day	**28-35 °C**
Basking spot	**38-42 °C**
Temperature, night	**20-24 °C**
Humidity	**20-40%**
UVB	**Recommended** Ferguson zone 3
Winter rest	**12-16 °C** 4-8 weeks
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Live-bearing**
Litter size	**1-4 young**
Gestation	**60-90 days**

PROTECTION AND PAPERWORK

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

About the species

Scincus mitranus is a compact, tapered skink of up to about 20 cm including the short tail. The back is orange-brown or sand-coloured and the belly white. The back has no bold pattern but is almost uniform or finely mottled in lighter and darker tones, often with faint dark crossbands on the back and legs. Nearly all adults have dark streaks or spots on the flanks, often together with pale ones. The snout is wedge-shaped and flat like a shovel, and the legs and tail are short. The scales are smooth and glossy, so the animal glides through the sand without injury. The very small ear opening is usually covered by two scales with serrated hind edges.

The closest relative, *Scincus scincus*, lives in North Africa and the western Middle East. *S. mitranus* differs in its range and in giving birth to live young. Several forms formerly described as separate species now belong to *S. mitranus*, among them *S. muscatensis*, *S. arabicus* and *S. philbyi*. The species name honours the Indian archaeologist and anthropologist Rajendralal Mitra (1824-1891). The original description was based on an animal that a merchant in Kashmir said came from Arabia.

The animal is active by day and very fast. It runs across the sand and vanishes below the surface in an instant if disturbed.

Distribution and habitat

Scincus mitranus lives in central, eastern and northern Arabia: in Saudi Arabia from the area around Riyadh eastwards to the Persian Gulf, in Kuwait, Bahrain, Qatar, the United Arab Emirates and Oman, where the species has been found as far south as Dhofar near the Yemen border. To the north-east it reaches south-western Iran around Ahvaz. To the west the range stops at the Asir and Yemen highlands. An occurrence in Pakistan has not been confirmed.

The occurrence follows the loose sand dunes that cover large parts of the peninsula.

> **Native range:** Saudi Arabia, Kuwait, Qatar, Bahrain, United Arab Emirates, Oman and Iran.

HABITAT

Scincus mitranus is a sand specialist that lives in fine, loose, wind-blown sand in dunes and sand plains. The animal spends most of its time buried, and when resting only the nostrils and perhaps part of the face stick up above the surface. From there it lies in wait for passing arthropods such as beetles and centipedes and seizes them. When in danger the animal dives under and moves through the sand as if it were water.

The sand is far cooler below than on the surface, so burying is also a way of regulating temperature. The species gives birth to live young, so there are no eggs to dry out in the hot sand.

Care

THE ENCLOSURE

Little is known about the care of *Scincus mitranus*, and the figures in this guide are borrowed from the closely related *Scincus scincus*, which lives in the same kind of sandy habitat.

The sand is the most important part of the set-up. The species digs and swims in the sand all day, so the floor must be a deep layer of clean, fine, rounded sand of 10-15 cm. Use dust-free sand without sharp edges, not gravel and not calcareous sand, which clumps. The sand must be dry and sifted regularly for droppings and food remains. Fine sand allows the fastest burrowing, but ordinary sifted river sand also works.

A pair needs an enclosure of at least 80 × 50 × 30 cm (length × width × height); for a single animal, 60 × 40 × 30 cm is enough. It is the floor area that counts, not the height. Shape the sand into a low mound under the lamp so the animal can bask. Place a few flat stones and a root as basking spots, and set them directly on the bottom of the enclosure before the sand goes in, so the animal cannot dig them free and topple them. A small buried box with a lid and damp sand in one corner, entered through an opening in the lid, gives the animal a place to shed. The enclosure needs a lid because the animal is fast, and good ventilation without draughts.

TEMPERATURE

The daytime temperature in the enclosure should be 28-35 °C, and at night it can fall to 20-24 °C. The enclosure needs a clear gradient with a hot basking spot under a spotlight and a cooler place at the other end. The sand surface at the basking spot should be 38-42 °C, measured with an infrared thermometer. The animal must always be able to dig down into cooler sand.

Use a thermostat on the heat source, and position the lamp so that it heats only one end. Measure both the surface and the temperature down in the sand. An animal that keeps away from the lamp and stays down in the sand is too hot; an animal that lies close to the lamp all day is too cold. Switch the lamps off at night.

A cool period in winter of 4-8 weeks at 12-16 °C with shorter days and no feeding imitates the seasons. The animals then lie buried in dry sand. In *S. scincus* the period precedes mating; for *S. mitranus* it is not documented.

Read more: Heat and temperature

HUMIDITY AND WATER

The species comes from the desert and must be kept dry, with a humidity of 20-40 %. The sand must not be damp, because damp encourages fungus and skin problems, and good ventilation is important.

Provide water in a very shallow, stable dish dug slightly into the sand, or mist a few drops onto a stone for the animal to lick. Change the water often, and wipe up spills so the sand does not get wet. The damp corner with the sand box is the only place where the sand is kept moist.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species lives in bright sunshine, so the enclosure needs strong light for 10-12 hours a day. Provide UVB corresponding to Ferguson zone 3 with a UV index of about 3 at the basking spot, for example from a T5 tube above the basking spot. The zone is an estimate based on the open habitat.

UVB tubes weaken with time and are replaced according to the manufacturer's instructions. There must be no glass or plastic between the tube and the animal. The animal receives no UVB when it lies under the sand, so the basking spot must be easy to reach. Let the light follow the day, and switch off at night.

Read more: Lighting and UVB

FEEDING

Scincus mitranus eats arthropods such as beetles and centipedes in the wild. In the enclosure, crickets, locusts, cockroaches, and mealworms and their pupae are suitable, and the prey should be no larger than the animal's head. The animal responds to movement and vibrations, so the food must be live.

Dust the insects with calcium, and give a vitamin supplement now and then; the insects themselves must be well fed. Young animals are fed every other day and adults 2-3 times a week. Remove insects that have not been eaten so they do not bother the animal when it lies in the sand. Offer the food on a flat stone so the animal does not swallow more sand than necessary. When the animal has eaten enough, it disappears into the sand.

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

BEHAVIOUR AND HANDLING

The species is an animal to watch, not to handle. It is fast and shy, and touching it stresses it. If an animal has to be moved, it can be gently sifted out of the sand or lured into a small container of sand. A hungry animal comes out at faint vibrations, for example a light tap on the glass.

Keep one animal or a pair with plenty of space and plenty of sand. Do not keep several males together, and separate the animals at signs of stress such as bites, injuries or animals that do not come out. The male may bite the female on the neck during mating. It is normal for the animal to lie buried and not be seen for long periods, especially when the temperature changes.

Breeding

SEXUAL MATURITY AND SEXING

The sexes look alike. In *S. scincus* the male has a spur-like scale on each side of the cloaca; whether the same applies to *S. mitranus* is not documented. Age and size at sexual maturity are not documented. Sexing without reliable external characters is best left to a vet with reptile experience.

MATING

In *S. scincus* mating takes place in spring and early summer, after the animals have come out of the cool period. The female gets bite marks on the neck, and the male mates several times over some weeks. Put the female in with the male, and take him out again if he is too persistent. Captive breeding of *S. mitranus* has not been documented.

Read more: Buying animals: captive-bred, wild-caught and transport

EGG-LAYING AND CLUTCHES

The species gives birth to live young: it is ovoviviparous, so the eggs develop inside the female and the young are born fully formed. Litter size, the length of gestation and the number of litters per year are not documented; the figures in the specifications (1-4 young, 60-90 days of gestation) are an estimate. Keep the pregnant female alone in the enclosure, give her plenty of food and calcium, and the same temperatures as usual.

INCUBATION

There are no eggs to incubate. The female needs the same temperatures as usual, and the basking spot must not be removed. Move the young to an enclosure of their own soon after birth, because older animals may eat newborn young.

REARING THE YOUNG

Newborn young are small and can be reared in a small enclosure of 40 × 25 × 20 cm with 8-10 cm of fine sand like the adults' and extra small hiding places. In *S. scincus*, newly hatched young are about 7 cm long and weigh about 2 g, and they take their first small crickets after a few days. Give small insects, for example small crickets, springtails and small mealworms, dusted with calcium, every other day, and give them UVB and a warm spot. Separate the young animals as they grow if they begin to fight.

Health and common mistakes

The species is hardy in a dry, warm enclosure with deep sand, and problems typically stem from errors in care:

- Skin and fungal infections from damp sand or poor hygiene.
- Irritated eyes and nostrils from dusty or sharp sand; choose clean, rounded sand.
- Metabolic bone disease from too little UVB and a one-sided diet without calcium.
- Constipation if the animal swallows sand with its food; feed on a flat surface.
- Intestinal worms: a sluggish animal that lies on the sand with closed eyes and eats little should have a faecal sample examined.
- Crushed toes and tail injuries if stones topple when the animal digs under them.

Quarantine new animals for at least a month. The animal hides illness well and often lies buried, so contact a vet with reptile experience in case of weight loss, changed appetite, swellings or an animal that lies still on top of the sand.

Read more: Quarantine and hygiene Read more: Common diseases and signs of illness

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.