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SNAKES

Rough-scaled sand boa

Eryx conicus

Eryx conicus is a small, heavily built sand boa from arid South Asia. It lies buried in loose soil with only its eyes and snout above the surface, waiting for prey. The female grows almost twice as long as the male. The species is calm and hardy, gives birth to live young and suits a beginner, although some animals are fussy feeders.

Family: Boidae English name: Rough-scaled Sand Boa Former name: *Gongylophis conicus*

KEY FACTS

THE ANIMAL

Adult size	**45-95 cm** total length incl. tail
Lifespan	**15-20 years**
Active	**At dusk and at night**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Semi-desert and dry forest**
Difficulty	**Beginner**

CARE

Min. enclosure	**75 × 40 × 30 cm** L × W × H for 1 adult
Temperature, day	**26-28 °C**
Basking spot	**30-32 °C**
Temperature, night	**22-26 °C**
Humidity	**50-65%**
Water	**Water dish**
UVB	**Optional**
Diet	**Vertebrates**
Kept	**Singly**

BREEDING

Reproduction	**Live-bearing**
Litter size	**7-12 young**
Clutches per year	**1**
Gestation	**120-150 days**

PROTECTION AND PAPERWORK

CITES	**Appendix II**
EU annex	**Annex B**
IUCN	**Near Threatened (NT)**

About the species

Eryx conicus is a compact, heavy snake with a small head, a short, pointed tail and small eyes with vertical pupils set high on the head. This allows the snake to lie completely hidden in the sand with only its eyes and snout free. The snout is broad and shovel-shaped and is used for digging. The species has small, keeled scales. The keels are weak at the front and become stronger towards the rear, so the hind part of the body feels rough. The ground colour is yellowish to brownish grey with a broad zigzag band or dark brown blotches along the back, and the belly is white.

The pattern resembles that of the venomous *Daboia russelii*, and in India the two are easily confused at first glance. The likeness is regarded as mimicry that protects the snake.

The sexes differ greatly. Males reach about 45-50 cm in length, while females grow to about 95 cm and are markedly heavier. The species was formerly placed in the genus *Gongylophis*, and both names are still seen in the trade. No subspecies are recognised.

E. conicus is mostly nocturnal and takes prey by lying in wait in the soil and striking when an animal passes. Caudal luring, in which the snake waves its tail and hind body when prey is close, has been seen in the species, but rarely. It kills its prey by constriction.

Distribution and habitat

Eryx conicus lives in South Asia: in southern Pakistan, in much of India from Jammu and Kashmir and Himachal Pradesh in the north to Kerala and Tamil Nadu in the south (but not in north-eastern India or the Andaman and Nicobar Islands), in Nepal and Bangladesh, and in the arid north of Sri Lanka. The type locality is Tranquebar in south-eastern India.

The species is regarded as near threatened (IUCN: NT).

> **Native range:** India, Pakistan, Nepal, Bangladesh and Sri Lanka.

HABITAT

E. conicus lives in sandy, dry stretches, in India for example in the central and southern parts of the country and in Punjab and Kutch, and in Sind in Pakistan. Most of the range has a hot climate with a pronounced rainy season and a long dry season. Detailed climate figures for the habitats are not documented.

The species is active at dusk and at night and spends most of its time buried in loose soil. Its food is mainly small mammals and birds, which it constricts; it is common among sand boas for lizards and insects to be taken as well.

Care

THE ENCLOSURE

An adult needs an enclosure of at least 75 × 40 × 30 cm (length × width × height); large females approaching 90 cm need 90 × 45 × 30 cm. The species uses almost no height, so floor area is what counts. Shallow plastic tubs are also suitable for adults. Young snakes do well in small, secure plastic boxes and are moved to a larger enclosure when they have grown.

The substrate should cover the whole floor and be 5-10 cm deep so that the snake can bury itself. Fine sand and a mixture of untreated topsoil and play sand (about 60% topsoil and 40% sand) both work, as do aspen shavings or finely chipped wood without dust. Paper and kitchen roll with a hide alone do not suit a burrowing snake, but can be used for young animals and in quarantine. Avoid cedar and pine.

Place two hides on the floor, one at the warm end and one at the cool end, preferably small enough for the snake to squeeze into. A shallow ceramic bowl 12-18 cm across is placed directly on the floor so that the snake cannot dig under it. Anything heavy must stand firmly on the floor, because the snake digs under it. The lid must close completely tightly. Remove droppings and urates as soon as they are seen, and replace the substrate completely every three to four months.

Read more: Quarantine and hygiene

TEMPERATURE

Eryx conicus needs a warm end and a cool end. The basking spot should be 30-32 °C, and the rest of the enclosure 26-28 °C by day. At night the temperature can fall to 22-26 °C, but this is not necessary for the snake's health.

Heat comes from a heat mat or heating cable under a third to half of the enclosure, or from a halogen bulb above, always controlled by a thermostat. Measure the substrate temperature with a probe on the floor in the warm side and the surface with an infrared thermometer. The snake must always be able to choose a cooler spot. It likes to use the basking spot after feeding and just before shedding.

Read more: Heat and temperature

HUMIDITY AND WATER

The species comes from dry regions, but humidity should be 50-65% so that shedding goes well. The substrate must be dry; the moisture comes from the air and from a humid hide. A hygrometer shows whether the figure holds.

Provide a humid hide in the cool end, for example a box with slightly damp sphagnum or sand that the snake can seek out itself, especially when it is about to shed. Remove it again afterwards. A permanently damp substrate causes skin problems. The bowl must always have fresh water, changed every day or every other day.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is most active at dusk and at night. UVB is not documented as necessary, but a weak UVB tube over one end is optional and supports the daily rhythm and vitamin D3 formation, as is recommended for the related *Eryx colubrinus*. If UVB is used, the UV index should be 2-3 at the basking spot, and the snake must always be able to retreat into the substrate or into a hide.

The light is on for 12 hours a day, controlled by a timer. All bulbs and tubes are switched off at night.

Read more: Lighting and UVB Read more: Calcium, vitamins and supplements

FEEDING

Eryx conicus takes whole prey. The staple food is mice. Preferably give thawed prey rather than live, because prey can bite and injure the snake. Thawed prey is taken more readily if it is moved with long tweezers. Offer it in the evening, just before the light goes out, because the snake is nocturnal. The species is shy when feeding: if disturbed while eating, it may drop the prey or regurgitate it. Put the food in and leave the snake in peace.

Newborn young take pinkies after their first shed and are fed every 7-10 days. After two to three months they can have fuzzy mice. Adults are sedentary and need only one meal every 2-3 weeks. For adults of 60-90 cm, mice of three to four weeks are suitable. Prey must be no wider than the snake at its widest point. The species puts on weight easily, so weigh it regularly and adjust the amount. Males in particular may refuse food for several weeks without coming to harm, as long as their weight holds. Snakes about to shed seldom eat, so skip feeding when the eyes are bluish. Pregnant females take food right up until shortly before birth.

BEHAVIOUR AND HANDLING

E. conicus is calm and hardy and seldom bites. Let new animals settle for two weeks, and start handling only when they are feeding regularly. Keep the first sessions short, and support the whole body. The rough scales at the rear make a struggling snake unpleasant to hold. Do not handle the snake straight after feeding.

Never place the snake freely on the floor, because it immediately looks for something to hide under and is quickly gone. Because the species burrows, it is often completely hidden in the substrate; a snake that cannot be seen has therefore seldom escaped. It lives best alone; a pair is kept together only for mating.

Breeding

SEXUAL MATURITY AND SEXING

The female is markedly larger than the male. Males can be sexually mature as early as one year old. The female's age at maturity is not documented, but she should weigh at least about 250 g before she is bred; large females weigh about 400 g. Sex is most reliably determined by probing, which should be carried out only by an experienced keeper or a vet. The female should be fully grown and in good condition before she is bred.

MATING

A cool period promotes mating. At the beginning of November, lower the temperature gradually over a week to 22-24 °C, hold it there for two weeks, and then raise the daytime temperature again, while the night is kept at about 22 °C until mid-January. The heat sources are switched off during the cooling period. Put the male in with the female in her enclosure once the daytime temperature has been raised again. Mating is typically seen from December to March, and both animals often lie completely buried with only their tails visible. Several males increase the chances of success.

EGG-LAYING AND CLUTCHES

Eryx conicus gives birth to live young. A litter is 7-12 young, and larger females do not have more, but larger young. Birth most often takes place from the end of May to August, and gestation lasts about 4-5 months. The pregnant female needs peace and constant access to heat and water. She often uses the warm spot for up to 12 hours at a time. Provide heat under half of the enclosure around the clock during gestation, and feed her every 3-4 weeks.

INCUBATION

There is no incubation, because the young are born alive and are independent from the first day. The pregnant female must have the same gradient as usual so that she can regulate her own temperature and the foetuses develop evenly. If she is too cold for a long time, this can result in weak or stillborn young. Remove dead young and foetal membranes as soon as they are noticed.

Read more: Incubating eggs

REARING THE YOUNG

Keep the young singly in small, completely secure plastic boxes with air holes, 2-3 cm of substrate, a small hide, a shallow water bowl and a warm and a cool zone. They shed for the first time within one to two weeks and eat only after that. Give pinkies every 7-10 days, with tweezers and only thawed. After two to three months they can have fuzzy mice. If a young snake refuses to eat, it helps to offer the prey in the evening in the dark.

Health and common mistakes

Eryx conicus is hardy, and most problems are caused by faults in care. The most common are:

- Stuck shed, especially on the tail tip and around the eyes, after shedding in an enclosure that is too dry. Provide a humid hide for the next shed.
- A permanently damp substrate, which causes skin infections and blisters on the belly. Keep the substrate dry.
- Too low a temperature, which causes poor digestion and regurgitation. Always measure both substrate and surface.
- Respiratory infections (wheezing, bubbles from the nose) with too low a temperature or dusty substrate.
- Obesity, because the species is sedentary and puts on weight quickly if fed too often.
- Mites, seen as small dots on and around the snake and in the hides.
- Birth problems, if the female cannot give birth to all the young.

Diseases specific to the species are not documented. See a vet with reptile experience if the snake loses weight, refuses to eat beyond its normal fasting, has its mouth open or wheezes, or if a birth drags on.

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.