herpy

SKINKS

Giant Blue-tongued Skink

Tiliqua gigas

A large, tropical skink from New Guinea and the Moluccas with a broad blue tongue and a calm, diurnal life on the forest floor. *Tiliqua gigas* needs more humidity than its Australian relatives, a large enclosure and UVB. Many animals in the trade are wild-caught and find it hard to get used to handling.

Family: Scincidae Former name: *Scincus gigas*

KEY FACTS

THE ANIMAL

Adult size	**45-60 cm** total length incl. tail
Lifespan	**15-20 years**
Active	**By day**
Lifestyle	**Terrestrial**
Habitat	**Rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**180 × 60 × 60 cm** L × W × H for 1 adult
Temperature, day	**24-33 °C**
Basking spot	**37-40 °C**
Temperature, night	**21-24 °C**
Humidity	**60-80%**
Water	**Water dish**
UVB	**Recommended** Ferguson zone 3
Diet	**Insects, fruit, plants and worms/snails**
Kept	**Singly**

BREEDING

Reproduction	**Live-bearing**
Sexually mature	**18-36 months**
Litter size	**5-15 young**
Clutches per year	**1**
Gestation	**90-120 days**

PROTECTION AND PAPERWORK

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

About the species

Tiliqua gigas has the heavy, tubular body, short legs, triangular head and broad blue tongue that characterise the genus *Tiliqua*. The tongue is used for defence and is displayed together with the pink mouth lining when the animal feels threatened. The name *gigas* comes from the giants of Greek mythology and is used for species that are large within their group.

The species was described in 1801 and has for a time been regarded as a subspecies of *Tiliqua scincoides*. Today it is divided into three subspecies: the nominate form *T. g. gigas* with its type locality on Ambon, *T. g. evanescens* from southern and eastern New Guinea and *T. g. keyensis* from the Aru and Kei Islands. The taxonomy is not finally settled. In the hobby, local forms such as Classic, Halmahera, Kei and Merauke are distinguished, and animals of the Irian Jaya type cannot be placed with certainty in any of the subspecies. The Classic form is ochre or greenish with brown crossbands, the Halmahera form is reddish or grey, the Kei form is freckled all the way up onto the head, and the Merauke form has the longest body and tail. The pattern varies greatly from animal to animal.

The species reaches about 45-60 cm in length. The figure is an estimate based on the genus, as precise measurements for *T. gigas* do not exist.

A large proportion of the animals in the trade are wild-caught, and animals sold as captive-bred may also be. Wild-caught animals are stressed and defensive, while captive-bred animals are tame. The tail can be shed if handled roughly.

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

Distribution and habitat

Tiliqua gigas lives in Indonesia on Ambon, Seram, Ternate, Halmahera, the Kei and Aru Islands and Yapen (Jobi) as well as in the Indonesian part of New Guinea. The species is also found in Papua New Guinea, on the Admiralty Islands, New Britain and other parts of the Bismarck Archipelago. It does not occur on Sulawesi.

T. g. evanescens lives in eastern and southern Papua New Guinea and in the Indonesian part of New Guinea, with its type locality near Port Moresby. *T. g. keyensis* is found on the Aru and Kei Islands and in the Indonesian part of New Guinea.

> **Native range:** Indonesia and Papua New Guinea.

HABITAT

The species lives in a tropical climate with warmth and high humidity all year. The animal moves on the ground in forest and at forest edges and hides in hollows, under leaf litter and in the soil. It is diurnal and basks in the morning. The habitat is only sparsely described, so care is based on experience with animals in captivity.

In the enclosure, tropical lowland is imitated with warmth, high humidity and a thick, damp substrate that the animal can dig in. At night the temperature falls only a little.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

An adult animal needs an enclosure of at least 180 × 60 × 60 cm (length × width × height), corresponding to just over 1 m² of floor area. Larger is better, and floor area matters more than height. With lamps inside the enclosure the height must be at least 60 cm. The animal must be kept alone, because both males and females are territorial, and fights can cause serious injuries.

The substrate must be 10-15 cm deep and retain moisture well, for example a mixture of 40 % topsoil, 40 % coconut fibre and 20 % play sand, preferably with sphagnum on top. A bioactive substrate with springtails and woodlice helps with humidity, but the animal tramples live plants, so choose robust plants with thick stems. Avoid aspen shavings and shavings of pine and cedar.

Provide many hides at both the warm and the cool end: bark tubes, hollow logs and boxes. A flat stone under the heat lamp provides warmth from below, but never use a heat rock with a built-in heating element. Ensure good ventilation and a secure lid.

Read more: Terrarium construction and bioactive substrate Read more: Feeder animals: keeping and breeding

TEMPERATURE

The animal must be able to choose between 24-29 °C at the cool end and 28-33 °C at the warm end. The surface of the basking spot must be 37-40 °C. At night the temperature must be 21-24 °C and not fall much below 21 °C. The figures apply to the Indonesian *Tiliqua* forms in general.

Use halogen spots or a heat lamp in a ceramic fitting above mesh, and put a thermostat on all heating equipment. Measure the surface temperature with an infrared thermometer and the air temperature with digital thermometers at both ends. If the room is cold at night, use a ceramic heater or a heating panel without light.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity must be 60-80 %, higher than for the Australian species. Measure it at the cool end, and aim for the upper part of the range. Humidity is maintained with a thick substrate that is watered through once a week so it is damp but not wet, and with daily misting in the morning or evening. A hide with damp sphagnum, replaced often, provides a pocket with humidity close to 100 %. A fogger or an automatic misting system can help, but must not run around the clock, because the substrate must also dry out a little now and then. Use distilled water or reverse osmosis water.

A large, shallow water dish with no more than 7-8 cm of water must always be available and changed every day. If the belly scales are rough, the air is too dry.

LIGHTING AND UVB

The species is diurnal and needs UVB and strong light. Use a T5 tube with UVB, and position it so that the UV index at the basking spot is about 3-4 (Ferguson zone 3). There must be no glass or plastic between the lamp and the animal, and mesh attenuates the radiation. The animal must not be able to get closer to the lamp than about 25 cm. Replace the tubes every 12 months, because the UVB output declines even though the light looks unchanged.

In addition to UVB, an LED of about 6,400 K gives good daylight. The light is on for 12 hours a day. The animals can live without UVB if the food contains D3, but it is not the best solution.

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

FEEDING

Tiliqua gigas is omnivorous. The staple is a varied mixture of animal protein, greens and a little fruit. Juveniles need 70-80 % protein, adults about 50-60 %. Adults need 40-50 % vegetables and leaves, and fruit at most 10 %. Too much protein causes obesity.

Protein can be crickets, locusts, cockroaches, black soldier fly larvae, snails, earthworms and silkworms as well as eggs and lean meat. Superworms and thawed pinkie mice are only treats. Greens are, for example, dandelion leaves, kale, endive, courgette, pumpkin and carrot, finely grated. Avoid avocado, onion, aubergine, citrus fruits and poisonous flowers. The feeder insects must be fed well for 2-3 days before feeding and dusted with calcium.

Juveniles are fed every day, subadults about 3 times a week and adults 1-2 times a week. A portion is about the size of the animal's head. Sprinkle a pinch of calcium over the food at each feeding; commercial reptile food needs no extra calcium. One particular commercial food is suspected of causing neurological disorders and growth stunting in *T. gigas*, so commercial food should only be part of a varied diet and never the only food.

BEHAVIOUR AND HANDLING

Wild-caught *Tiliqua gigas* are stressed, defensive and at times aggressive, and some never become fully tame. Captive-bred animals are far calmer, and the Merauke form is generally calmer than the others. Speak calmly to the animal, let it come to you at its own pace, and begin with short handling sessions of about 5 minutes.

When you lift the animal, the whole body including the tail must rest on your forearm. Never grab the tail. Snorting and waving the tail signal irritation. An open mouth with the tongue out is defence, and the animal should then be left in peace. Keep each animal alone, and wash your hands after handling.

Breeding

SEXUAL MATURITY AND SEXING

The age at sexual maturity is not known for the species. In *Tiliqua scincoides* it occurs after about one and a half to three years, and the figure in the box is borrowed from there. The sexes are hard to tell apart externally, because size, head shape and tail length overlap, and probing can injure the animal. The safest method is a brief endoscopic examination of the bladder under anaesthetic at the vet (cystoscopy), in which the gonads can be seen through the bladder wall. X-ray with contrast fluid in the hemipenal pockets is far less reliable in this species.

MATING

The male and female are only put together under supervision and separated again if the male bites persistently. Mating is rough, and the female may get bite marks. The female must be healthy and in good condition. A fixed breeding season and a necessary hibernation are not known for the species.

Read more: Brumation and the seasons

EGG-LAYING AND CLUTCHES

The species is live-bearing. The litter size is not known for *T. gigas*, and the figure in the box, 5-15 young once a year, is borrowed from *Tiliqua scincoides*. The pregnant female needs plenty of food, calcium and a warm basking spot. If she becomes lethargic, stops eating or strains without result, contact the vet.

INCUBATION

There are no eggs to incubate. The length of gestation is not known for the species, and the 90-120 days in the box are borrowed from *Tiliqua scincoides*. The female must have the same temperatures as usual, and the basking spot must be maintained, because the warmth drives embryonic development. Keep her alone in the enclosure.

REARING THE YOUNG

The young must live separately in a smaller enclosure with a damp substrate, hides, UVB and a basking spot. They eat straight away and must be fed every day with about 70-80 % protein: small crickets, earthworms, eggs and finely grated greens, dusted with calcium. They grow quickly, and the colours become clearer with age. Keep them apart to avoid bites.

Health and common mistakes

Most problems are caused by husbandry. The typical ones are:

- Metabolic bone disease from a lack of calcium, vitamin D or UVB. It causes soft jaws and crooked legs.
- Shedding difficulties with too low humidity. Provide a humid hide and a lukewarm bath.
- Skin infections and respiratory infections if the substrate is constantly wet or the temperature is too low.
- Dental problems if a lot of fruit is given, and obesity from too much protein.
- Parasites in wild-caught animals. New animals should be quarantined for 3-6 months and have a faecal sample examined.
- Neurological disorders and growth stunting, which are suspected to be connected with a one-sided diet of a single commercial food.

Weigh the animal regularly; sudden weight loss is a warning sign. Seek a vet with experience in reptiles if the animal loses weight, stops eating, breathes with its mouth open or with wheezing sounds, or seems listless.

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.