herpy

GECKOS

Golden gecko

Gekko badenii

Gekko badenii is a medium-sized, golden climbing gecko from the granite cliffs of Vietnam with pale crossbands across the back and a calm disposition once it has settled in. It is nocturnal, eats both insects and fruit and does well in a medium-sized enclosure, but many animals in the trade are caught in the wild, and the species is assessed as endangered.

Family: Gekkonidae Former name: *Gekko ulikovskii*

KEY FACTS

THE ANIMAL

Adult size	**13-20 cm** total length incl. tail
Lifespan	**10-20 years**
Active	**At night**
Lifestyle	**Arboreal and rock-dwelling**
Habitat	**Rainforest and rocky terrain**
Difficulty	**Intermediate**

CARE

Min. enclosure	**45 × 45 × 60 cm** L × W × H for 1 adult
Temperature, day	**23-29 °C**
Temperature, night	**21-23 °C**
Humidity	**60-80%**
UVB	**Optional**
Diet	**Insects, fruit and complete diet**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**2 eggs**
Incubation	**60-90 days** at 25-30 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Annex D**
IUCN	**Endangered (EN)**

About the species

Gekko badenii is a medium-sized gecko with a pale yellow to pale orange ground colour and four to eight pale, almost white crossbands from the nape out over the tail. The limbs are pink to whitish, and the belly is whitish. The females are slightly smaller than the males and often more brownish. The males have 10-18 pores in front of the vent and fleshy bumps at the base of the tail. Males reach about 18-20 cm and females 13-18 cm including tail. The body and the tail each grow to at most about 11 cm.

The species was described in 1994 by two teams of researchers a few weeks apart. One group called it *Gekko badenii* after Ba Den mountain in Tay Ninh, the other *Gekko ulikovskii*. The name *badenii* was published on 15 April, a month before *ulikovskii*, and therefore has priority, but *ulikovskii* is still used in the trade and in older literature. The species is closely related to *Gekko petricolus* and belongs to the same genus as *Gekko gecko*, but is smaller and far more subdued.

G. badenii is hardy and can live 15 years or more in captivity, a few over 20. It is quick, however, and has delicate skin, so it is not suited to much handling. Some animals bite, but most are not aggressive. The weight is not documented.

In the trade there are far more males than females. The ratio can be 1 female to 12 males or more skewed, which makes it hard to find a pair. The tail can be shed and grows back, but never grab it.

Distribution and habitat

Gekko badenii lives only in Vietnam, as far as is known. It is described from Tay Ninh Province in the south, where Ba Den Mountain lies, and from Kon Tum Province in the central highlands near the border with Laos and Cambodia. There are also records from Kien Giang Province in the far south-west. The precise range is not known, and it is uncertain whether the species also occurs in Cambodia. It has not been found in Laos.

Most records are from the area around Ba Den and Phu An in Tay Ninh. The map therefore shows only Vietnam as certain range.

> **Native range:** Vietnam.

HABITAT

Gekko badenii is tied to granite cliffs and rocky areas, also in lowland rainforest, from sea level up to 986 metres. It also lives on sandstone formations in the transition to rainforest. By day it stays hidden, and it becomes active when it gets dark.

The climate in southern Vietnam is tropical with a dry season and a rainy season, and it is warm all year round. The figures under care are based on experience in captivity. The animals drink the raindrops that collect on the leaves.

Care

THE ENCLOSURE

An adult *Gekko badenii* needs an enclosure of at least 45 × 45 × 60 cm (length × width × height). Keep the animal alone, or a male together with one or more females in a larger enclosure with many hiding places. Two males must not be kept together, because they fight.

Furnish with cork, branches, plants and stones and with more than one hiding place per animal, because many animals switch between several favourite spots. The gecko can secrete a foul-smelling fluid and leave traces of it on the glass, so the glass must be wiped regularly. It is not harmful but makes it hard to see the animal. As substrate you can use coconut fibre or bark chips for terrariums. Be careful with small particles, because a greedy gecko can swallow them when hunting insects. The enclosure must have a mesh lid with good ventilation.

TEMPERATURE

By day the enclosure is kept at 23-29 °C, and at night at 21-23 °C. A heat bulb or a ceramic heat emitter controlled by a thermostat can keep up the heat if the room is too cold. If you want to see the animal at night, you can use a weak night bulb. It is a good idea to have a slightly warmer and a slightly cooler end, so that *Gekko badenii* can choose for itself. The species tolerates a wide temperature range.

Measure the temperature with a digital thermometer both at the top and at the bottom. An animal that constantly hides at the coolest end or gapes with its mouth open is too hot.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity should be 60-80 %, because *Gekko badenii* comes from rainforest. Mist the enclosure daily with lukewarm water, so that the humidity rises and the gecko can drink the droplets from leaves and glass. Let the enclosure dry out a little during the day, and ensure ventilation so that mould does not develop.

Also put in a shallow bowl of fresh water, and change the water every day. Most animals drink both from the bowl and from the droplets. A cheap hygrometer shows whether you are getting it right.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Gekko badenii is nocturnal and does not need UVB light as long as it gets vitamin D3 through the food. If you still want to give UVB, use a weak tube for shade-dwelling animals. The right Ferguson zone for the species is not known.

Keep ordinary light on for 10-12 hours a day, preferably controlled by a timer, and keep it completely dark at night. If you use UVB, make sure there is shade and hides throughout the enclosure, so that the animal can get away from the light.

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

FEEDING

Gekko badenii eats both insects and fruit. Give a varied diet of crickets, cockroaches and mealworms, supplemented with ripe mango, papaya and banana or prepared food for *Correlophus ciliatus*, mixed into fruit purée. The animals easily lose interest if they always get the same, so alternate between insects and fruit. The species also eats spiders and small vertebrates.

Young animals are fed every day, while adults only need food every fifth to sixth day. Give what the animal eats in a few minutes, and remove leftovers the next morning. Give a supplement of calcium and vitamin D3 once a week, either dusted on the insects or mixed into the fruit purée. Females that are about to lay eggs sometimes take supplements from a small dish.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Gekko badenii is fast and has very delicate skin, so it is not suited to much handling. Some bite, but most are not aggressive. With patient and gentle handling some animals can become very calm, but it is not an animal to have in the hand every day. If you have to handle it, approach slowly and let it walk onto your hand or into a transport box. New animals should have a couple of weeks in peace to settle in.

Males are territorial and should be kept separately. Females can live together. Still, keep watch, and be ready to separate the animals if they fall out.

Breeding

SEXUAL MATURITY AND SEXING

The male of *Gekko badenii* can be recognised by a row of pores in front of the vent, a longer base of the tail and fleshy tubercles at the base of the tail. Females have no pores and are slightly smaller and often more brownish. Age and size at sexual maturity are not known. A good starting point is to wait until the female is fully grown and in good condition, and not to push her into laying too early.

MATING

Gekko badenii mates in a season from March to September. The need for a winter rest is not known. Put the male in with the female in her enclosure, and watch whether she is reluctant or gets injured. Separate them at once if there are fights.

EGG-LAYING AND CLUTCHES

Like all geckos in the genus *Gekko*, *Gekko badenii* lays two hard-shelled eggs at a time. They are glued to the surface, for example a rock or a crevice, and should not be buried. The number of clutches per year is not known. *Gekko gecko* lays about four to eight clutches per season.

Give the female flat pieces of cork or slate where she can stick the eggs, and plenty of calcium and insects throughout the season. The species does not tend its eggs or young.

INCUBATION

The eggs of *Gekko badenii* hatch after 60-90 days at 25-30 °C. The eggs are glued fast and break easily if you try to pick them loose. Leave them where they are, and cover them so that the adults cannot reach them, or move the whole stone or piece of cork to an incubator. Keep the humidity high with damp vermiculite or perlite nearby, but do not let the eggs get wet. It has not been studied whether temperature affects the sex in the species.

Read more: Incubating eggs

REARING THE YOUNG

The adult animals actively hunt the young, so young *Gekko badenii* must be separated from the adults immediately after hatching. The young do well in a small enclosure of about 38 litres. Give the young small insects every day, dusted with calcium and D3, and keep them warm and humid. Weigh them regularly and separate the animals if differences in size arise.

Health and common mistakes

The typical problems in *Gekko badenii* are the same as in other geckos:

- Too little calcium and vitamin D3, which causes soft bones, tremors and bent limbs. Dust the insects, and give a supplement once a week.

- Shed skin stuck on the toes and tail tip if the air is too dry. Keep the humidity up.
- Fungus and mould if the substrate is constantly wet and ventilation is poor.
- Ingestion of substrate if the animal is very greedy when hunting. Use a coarse substrate or kitchen roll.
- Parasites and emaciation in wild-caught animals. Buy captive-bred animals, therefore, if they can be found.

See a vet experienced with reptiles if the gecko loses weight, does not eat for several weeks or seems limp.

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.