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FROGS

Chinese Gliding Frog

Zhangixalus dennysi

Zhangixalus dennysi is one of the largest tree frogs in South-East Asia, a sturdy, pale green gliding frog from humid forests in south-eastern China, Laos, Myanmar and Vietnam. Females reach up to 14 cm. The large webbing between the toes is used to glide between the branches, and males have an unusually powerful call.

Family: Rhacophoridae Former name: *Rhacophorus dennysi; Polypedates dennysi*

KEY FACTS

THE ANIMAL

Adult size	**8-14 cm** snout-vent length
Lifespan	**5-10 years**
Active	**At dusk and at night**
Lifestyle	**Arboreal**
Habitat	**Rainforest and montane forest**
Skin toxins	**None known**
Difficulty	**Intermediate**

CARE

Min. enclosure	**80 × 50 × 100 cm** L × W × H for 2 adults
Temperature, day	**20-25 °C**
Temperature, night	**15-20 °C**
Humidity	**60-90%**
Water	**Water dish** depth 3-5 cm
UVB	**Recommended** Ferguson zone 2
Diet	**Insects**
Kept	**Singly, in pairs or in groups**

BREEDING

Reproduction	**Egg-laying**
Development	**Tadpoles in water**
Egg-laying site	**In a foam nest**
Eggs per clutch	**3,500**
Hatching	**7 days**
Larval period	**35-45 days** from hatching to metamorphosis
Larval diet	**Complete diet**
Parental care	**None**

PROTECTION AND PAPERWORK

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

About the species

Zhangixalus dennysi is a very large, sturdy tree frog with a triangular head, a large eye with a golden-brown iris and a horizontal, slit-shaped pupil, and a distinct, round eardrum. The upper body is yellowish green to green, the underside white. Fingers and toes end in large adhesive discs, and between the toes there is large webbing. When the frog jumps from a branch, the skin is stretched out, so that it can glide between branches and trees and steer with its feet during the glide.

Females are far larger than males. They typically reach about 10 cm and can reach 14 cm from snout to vent, while males are markedly smaller. The size of males and the weight of the species are not documented. Males have an unusually powerful call.

The species was described in 1881 by William Thomas Blanford as *Rhacophorus dennysi*. It has since been moved back and forth between the genera *Polypedates* and *Rhacophorus* and in 2019 was placed in the new genus *Zhangixalus*. The genus name honours the Chinese zoologist Zhang Ya-Ping. The division is disputed, and the name *Rhacophorus dennysi* is still used.

The frog is active at dusk and at night and should not be handled. No toxic skin secretion is known, but wash your hands before and after working in the terrarium, and do not touch your eyes or mouth afterwards.

Lifespan in captivity is not documented; 5-10 years is an estimate based on other large tree frogs.

Distribution and habitat

Zhangixalus dennysi lives in south-eastern China, Laos, Myanmar and Vietnam. The species is widespread and probably common in large parts of the area, and the range includes several protected areas.

The frog is found from about 80 to 1,500 m above sea level.

> **Native range:** China, Laos, Myanmar (Burma) and Vietnam.

HABITAT

Zhangixalus dennysi lives in humid forest in the lowlands, in the mountains and on wooded hills, preferably near streams. It is found mostly in primary forest, but is also a follower of human settlement and is seen near cultivated areas. The species is above all active at dusk and at night and stays mostly in the trees.

For breeding, the female lays about 3,500 eggs in a foam nest, which can reach up to 20 cm in diameter. The nest hangs on branches and grass above water, and the female whips a slimy fluid into foam with her hind legs. The tadpoles fall into the water beneath the nest and develop in rice paddies, water-filled holes, ponds and marshes.

The climate in the range is subtropical with warm, rainy summers and cooler winters. Its diet in the wild is insects.

Read more: Rearing tadpoles

Care

THE ENCLOSURE

Little is known about keeping *Zhangixalus dennysi*, and the recommendations are based on the size and habitat of the species and on experience with the closely related *Zhangixalus arboreus*, which is a slightly smaller species from cool forests in Japan. Many of the figures are borrowed from there.

The terrarium must be tall and spacious. A pair needs at least 80 × 50 × 100 cm, and a small group of 4-5 animals needs at least 100 × 50 × 100 cm; more animals require more floor area. The frog is large and heavy and glides, so there must be room to jump and land.

Furnish with many sturdy branches, cork and vertical plants. Use robust plants with large, strong leaves that can support a heavy frog, for example *Fatsia japonica* or *Epipremnum*, and plant densely in front of the glass, so that the frog does not collide with large, open glass surfaces. The floor can be a moisture-retaining substrate of soil and dead leaves. Mesh across a large part of the lid provides ventilation, so that the air does not stand still.

TEMPERATURE

By day the temperature should be 20-25 °C and at night 15-20 °C, corresponding to a cool living room. The temperature must not exceed 28 °C for any length of time. Do not use heat lamps, and keep an eye on a digital thermometer, especially in summer.

The temperatures are an estimate based on the subtropical climate in the range. A winter rest is not documented for the species and is not necessary.

HUMIDITY AND MISTING

Humidity should be 60-90 %, lowest by day and highest at night. Live plants keep the air humid, because they release water at night, and a large, open water bowl helps. Mist the terrarium a little every evening, and let it dry out a little during the day, so that mould and stagnant air are avoided.

Use dechlorinated tap water, rainwater or reverse-osmosis water. If the frog looks sluggish or the skin is wrinkled, increase the humidity and lower the temperature immediately.

Read more: Humidity, misting and ventilation

WATER AND WATER QUALITY

Place a large, shallow water bowl in the terrarium, which the frog can sit in freely; it may cover up to half of the floor. The water should be 3-5 cm deep, so that the frog easily gets out again, and at the same temperature as the air. Change the water every day, and use dechlorinated tap water, rainwater or reverse-osmosis water. Never use soap or cleaning products nearby, because amphibians absorb substances through the skin.

LIGHTING AND UVB

The species is arboreal and active at dusk, and a weak UVB source is recommended: a T5 tube that gives a UV index of about 3 on the uppermost leaves (UVB zone 2). Always provide shaded places where the frog can retreat.

Use LED lighting for the plants, and avoid lamps that give off heat. The day length may follow the season, so that the frog gets a natural daily rhythm.

Read more: Lighting and UVB

FEEDING

Zhangixalus dennysi eats live insects and readily takes large feeder insects. Use crickets as the main food, supplemented with grasshoppers and cockroaches. Feeder insects must be gut-loaded and dusted with calcium, now and then with a vitamin supplement containing D3.

Adults are fed twice a week with 3-6 large crickets per animal, slightly more in the breeding season. Offer the food with long tweezers, or scatter it, and remove feeder insects that are not eaten.

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

BEHAVIOUR AND HANDLING

The species is active at night and at dusk and sits hidden among the leaves by day. The frog is large, powerful and jumps and glides wildly when startled, so it should be handled as little as possible. The skin is thin and sensitive. If it has to be moved, use a damp plastic container.

The species can be kept singly, in pairs or in a small group in a spacious terrarium with many perches. Males call loudly, especially in the breeding season, so the frogs can be heard throughout the house.

Breeding

SEXUAL MATURITY AND SEXING

Females are far larger than males, and the sex can be seen from the size when the animals are adult. Only the males call. The age at sexual maturity is not documented. A pair is enough to get eggs, but a small group with several females gives more nests.

MATING

The species breeds at water, where the female hangs the foam nest above the water surface. In the terrarium, breeding is triggered by imitating the rainy season; the method is known from the closely related *Zhangixalus arboreus*. Mist the terrarium every evening from early summer, and give an extra feeding a week. Then build a rain chamber: a pump that lets it rain over part of the terrarium for 20 minutes at a time every third hour during the day and for one hour straight at night, with about 8 cm of water on the bottom. The males begin to call almost immediately, and the first nests appear after a few days.

EGGS AND TADPOLES

The female lays about 3,500 eggs in a large foam nest, which can reach 20 cm in diameter. The nest hangs in plants and on branches above water. The eggs are cream-coloured and lie in the middle of the foam. The parents care for neither eggs nor tadpoles.

When the tadpoles hatch, they slide down into the water beneath the nest, so there must be about 8 cm of water beneath the leaves where the nest hangs. The leaf with the nest can also be cut off and hung above an aquarium.

The care of the tadpoles is not documented for *Zhangixalus dennysi*, but the care of *Zhangixalus arboreus* is a good starting point: 18-20 °C, about 8 cm of water with pieces of cork for cover and aquatic plants, and a daily water change of 5-10 %, siphoning droppings and food remains from the bottom. The tadpoles eat spirulina tablets that sink to the bottom; lettuce, cucumber and green flakes are not eaten.

METAMORPHOSIS

The eggs hatch after about a week, and the larval period is 35-45 days. The figures are borrowed from *Zhangixalus arboreus* and are only a guide for *Z. dennysi*.

After about three weeks the hind legs appear, and after five weeks the forelimbs. When the forelimbs appear, the tadpoles stop eating and need easy access to land: put cork or branches in the water, and fit a lid or mesh on the aquarium, so that the newly metamorphosed froglets cannot escape.

REARING THE YOUNG

The newly metamorphosed froglets go into a small, humid terrarium with wet kitchen paper on the floor, plants and a large, shallow water bowl. Humidity must be 80 % or more at first. Once the tail has been absorbed, they are given small crickets after the second shed, dusted with calcium; give a little and often. Sort by size, so that the smallest are not outcompeted, and keep the young separate until they are large enough to cope among the adults.

Health and common mistakes

Common problems in large tree frogs in terrariums are:

- Desiccation and too high a temperature. The signs are lethargy, wrinkled skin and outstretched legs. Keep an eye on the thermometer and hygrometer.
- Injuries from jumping against the glass, especially in wild-caught animals. Plant densely in front of the glass.
- Infectious diseases and parasites, especially in wild-caught animals. Quarantine new animals, and use separate equipment.
- A one-sided diet or a lack of calcium and D3, which can cause weakened bones. Vary the food.

See a vet with expertise in amphibians if the frog stops eating, has sores, swellings or reddish areas on the skin, or sits listlessly on the floor.

Read more: Quarantine and hygiene 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.