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FROGS

Llanos Frog

Lepidobatrachus llanensis

Lepidobatrachus llanensis is a broad, flattened aquatic frog from the dry Gran Chaco of South America and the closest relative of *Lepidobatrachus laevis*. It lies in wait in shallow water, burrows down and forms a cocoon in the dry season. The species is rare in captivity, and almost nothing is known about its care. It must live alone and bites, so it is an animal to look at, not to handle.

Family: Ceratophryidae

KEY FACTS

THE ANIMAL

Adult size	**7-10 cm** snout-vent length
Lifespan	**5-15 years**
Active	**At dusk and at night**
Lifestyle	**Burrowing and semi-aquatic**
Habitat	**Semi-desert and savanna**
Skin toxins	**None known**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 30 × 40 cm** L × W × H for 1 adult
Temperature, day	**24-28 °C**
Temperature, night	**20-23 °C**
Humidity	**60-70%**
Water	**Aquaterrarium** depth 5-20 cm
UVB	**Optional** Ferguson zone 1
Diet	**Insects, vertebrates and worms/snails**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Development	**Tadpoles in water**
Egg-laying site	**In water**
Eggs per clutch	**1,400**
Larval period	**14 days** from hatching to metamorphosis
Larval diet	**Other tadpoles**
Parental care	**None**

PROTECTION AND PAPERWORK

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

About the species

Lepidobatrachus llanensis is a compact, flattened frog with a large head, a wide mouth, and eyes and nostrils set high up, so that it can lie almost completely under water and still see and breathe. It belongs to the family Ceratophryidae and is the sister species of *L. laevis*. Unlike that species, *L. llanensis* has two or three small bony plates in the skin in the middle of the back. The species was described in 1963 by Osvaldo Reig and José Cei.

Adults are about 7-10 cm from snout to vent and are thus smaller than *L. laevis*. The size difference between the sexes is not documented.

The lower jaw has a pair of sharp, tooth-like projections, and the frog snaps at anything that moves, so it should not be picked up. Toxic skin secretions have not been described, but always wash your hands after contact with the animal and the water.

Distribution and habitat

Lepidobatrachus llanensis is found in northern Argentina (the provinces of Formosa, Chaco, Salta, Santiago del Estero, Córdoba, Catamarca and La Rioja), in western Paraguay (the department of Alto Paraguay) and in southern Bolivia (the Gran Chaco province in Tarija). It lives in the lowlands, mostly below 300 m above sea level. The species is scarce and lives in two separate populations: one in the dry Chaco and one in the northern Chaco.

> **Native range:** Argentina, Bolivia and Paraguay.

HABITAT

Lepidobatrachus llanensis lives in dry scrub and semi-arid areas in the Gran Chaco. The landscape is flat, the rain falls in summer, and for much of the year there is no open water. In the cool, dry season the frogs lie buried without eating. Mating and egg laying take place in the rainy season from October to February in temporary pools on clay soil, often in roadside ditches, and in water tanks on cattle farms.

In the dry season the frog burrows down and surrounds itself with a cocoon of shed skin, which greatly limits water loss. It stays in the ground until the rain returns. The species is listed as Least Concern (LC), but it is losing habitat to agriculture, logging and pollution.

Care

THE ENCLOSURE

Very little is known about the care of *Lepidobatrachus llanensis*, and the species is only rarely kept. The care is based on its habitat, dry scrub and temporary water, and on the closely related *Lepidobatrachus laevis*, which has the same way of life and is far better known in captivity. The figures are borrowed from *L. laevis*.

An adult frog is kept alone in an enclosure of at least 60 × 30 × 40 cm, where most of the floor is water. Height matters little, as the genus does not climb. The container needs a lid with mesh so that the frog does not jump out. A platform or slope of large, smooth stones gives access to land, and stones, tubes and clay pots provide hiding places. Everything in the enclosure must be too large to be swallowed; gravel and small stones are not used, because the frog swallows them when it strikes at food.

TEMPERATURE

By day the water and air are kept at 24-28 °C and at night at 20-23 °C. Cold water makes the frog a poor feeder and more susceptible to disease, so a thermostat-controlled heater is necessary in most living rooms. Above 30 °C can quickly become dangerous.

In the wild the species lies buried without eating through the cool, dry season. Whether a rest is necessary in captivity is not documented.

Read more: Heat and temperature

HUMIDITY AND MISTING

Humidity is kept at 60-70 %, and the large water surface manages this almost on its own. Good ventilation is more important than humidity: at least half of the lid must be mesh, because still, humid air causes skin infections. Misting is normally unnecessary.

Read more: Humidity, misting and ventilation

WATER AND WATER QUALITY

The water is the frog's home, and water quality is the most important part of its care. The water is 5-20 cm deep, and the frog must always be able to reach both the surface and land without swimming. Use tap water treated against chlorine and chloramine, and never use soap or detergents on the container or the furnishings, because amphibians absorb substances through the skin. The frog produces a lot of waste, so a filter with a gentle current is necessary. Droppings are siphoned out immediately, followed by a partial water change.

LIGHTING AND UVB

UVB is not necessary. An ordinary fluorescent tube for 12 hours a day gives a clear day-night rhythm. It must be dark at night, because the species is probably most active in the evening and at night.

Read more: Lighting and UVB

FEEDING

The species is a predator and takes anything it can overpower. The feeding is borrowed from *L. laevis*: earthworms, crickets, locusts, roaches and waxworms. Young animals are fed daily and adults with a good meal two to three times a week. The food is dusted with calcium and a multivitamin with D3. Fatty food such as pinky mice is given only rarely, because the frog easily becomes overweight. Feed with long tweezers and never from the hand.

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

BEHAVIOUR AND HANDLING

Lepidobatrachus llanensis lives as a loner and must be kept alone: the tadpoles eat each other, and adult frogs of the genus may eat their own kind. The frog is an animal to look at and should not be picked up, both because of the bite and because the skin is sensitive. If it has to be moved, use a box or wet, powder-free nitrile gloves, and keep your fingers away from the mouth.

Read more: Rearing tadpoles

Breeding

SEXUAL MATURITY AND SEXING

Sexual maturity and differences between the sexes are not documented for *Lepidobatrachus llanensis*. In *L. laevis*, females are larger than males.

MATING

Captive breeding is not documented for *Lepidobatrachus llanensis*. In the wild it breeds after rain from October to February. In *L. laevis* this is imitated with a cool, dry rest followed by rain and heavy feeding, but it requires healthy animals and has not been tried for *L. llanensis*.

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

EGGS AND TADPOLES

The small, dark eggs are laid on the muddy bottom of temporary pools, and there is no parental care. The number of eggs is not documented for *Lepidobatrachus llanensis*; the figure in the specification box, about 1,400 eggs, is borrowed from *L. laevis*.

The tadpoles are predators with an enormous mouth and eat small crustaceans, insect larvae and other tadpoles, including their own siblings. They must therefore be kept separately in small containers with clean, lukewarm water and plenty of live food.

METAMORPHOSIS

Hatching time is not documented. The tadpoles grow very fast and have completed metamorphosis after about two weeks, because the pools last only a short time. They keep eating throughout metamorphosis. When the forelimbs appear, the water level must be lowered, and there must be easy access to land, for example a sloping stone. The froglets must be separated immediately.

REARING THE YOUNG

Rearing of newly metamorphosed froglets is not documented for the species. The froglets must live separately in small containers with a little water, a platform and hiding places, as with *L. laevis*, and they are fed daily with small crickets and pieces of earthworm, dusted with calcium and D3. Rearing in groups causes losses, even when the froglets look equal in size.

Health and common mistakes

Health problems are not documented for *Lepidobatrachus llanensis*. In *L. laevis* the typical problems are skin infections from dirty water and still air, swallowed foreign objects, obesity and water that is too cold, and the same must be expected here. See a veterinarian with amphibian expertise if the frog stops eating, loses weight or develops sores or red skin.

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.