herpy

POISON DART FROGS

Peru Poison Frog

Ameerega petersi

Ameerega petersi is a small, diurnal poison frog of 24-30 mm from the rainforest at the foot of the Andes in eastern Peru and western Brazil. The back is brown with a pale, oblique side stripe. The species is rarely kept, and little is known about its care.

Family: Dendrobatidae Former name: *Epipedobates petersi; Dendrobates petersi*

KEY FACTS

THE ANIMAL

Adult size	**2-3 cm** snout-vent length
Lifespan	**10-15 years**
Active	**By day**
Lifestyle	**Terrestrial**
Habitat	**Rainforest**
Skin toxins in the wild	**Mild**
Skin toxins in captivity	**None** Captive-bred animals. Wild-caught animals can keep their toxins for a long time
Difficulty	**Intermediate**

CARE

Min. enclosure	**45 × 45 × 45 cm** L × W × H for 2 adults
Temperature, day	**25-28 °C**
Temperature, night	**21-25 °C**
Humidity	**70-100%**
Water	**Water dish** depth 1-2 cm
UVB	**Optional** Ferguson zone 1
Diet	**Small invertebrates (springtails, fruit flies)**
Kept	**In pairs**

BREEDING

Reproduction	**Egg-laying**
Development	**Tadpoles carried to water**
Egg-laying site	**On the ground**
Eggs per clutch	**4-16**
Hatching	**10-22 days**
Larval period	**70-90 days** from hatching to metamorphosis
Larval diet	**Algae/plants and complete diet**
Parental care	**Guards the eggs and carries the tadpoles**

PROTECTION AND PAPERWORK

CITES	**Appendix II**
IUCN	**Least Concern (LC)**

About the species

Ameerega petersi is a small poison frog of 24-30 mm from snout to vent; females grow slightly larger than males. The back is brown, and a pale, yellowish stripe, often with a greenish tinge, runs obliquely along the side all the way to the eye. A white or yellowish lip stripe runs all the way to the tip of the snout. The unbroken stripes distinguish the species from *Ameerega macero*, in which both stripes are shortened and the back is red.

The species was described in 1976 by Philip Silverstone as *Phyllobates petersi* and named after the herpetologist James Arthur Peters. Since then it has stood in *Dendrobates* and *Epipedobates*. The original type series turned out to include another species, *Ameerega simulans*, from south-eastern Peru. The form formerly called *Ameerega smaragdina* has been counted as part of *A. petersi* since 2019. The male's call is unusually varied: series of single, double or triple notes.

In the wild the skin contains alkaloids, including histrionicotoxins and decahydroquinolines, which the frog takes up from its food. Animals reared on ordinary feeder insects lack the toxin. Wash your hands before and after working in the vivarium all the same.

Distribution and habitat

Ameerega petersi is found in eastern Peru in the river systems around the Ucayali and Huallaga, including in the regions of Huánuco, Pasco and Ucayali, and in western Brazil in the state of Acre. The type locality is the village of Santa Isabel on the Río Nevati in the Pachitea system in Pasco, at about 460 m above sea level. The species is known from several protected areas, including Yanachaga-Chemillén and Cordillera Azul in Peru and Serra do Divisor in Brazil.

The IUCN assesses the species as not threatened, although deforestation for agriculture removes habitat locally.

> **Native range:** Peru and Brazil.

HABITAT

Ameerega petersi lives in primary rainforest in the lowlands and at the foot of the mountains, from about 250 to 800 m above sea level. The frog lives in the leaf litter on the forest floor, where the air is humid and shady, and it is not found in disturbed forest. The climate is warm and humid with rain for most of the year; the temperature varies only a little through the year, and the nights are a few degrees cooler than the days.

The female lays the eggs in the leaves, and when they have hatched, the adults carry the tadpoles on their backs to small streams, where they develop.

Read more: Rearing tadpoles

Care

THE ENCLOSURE

Little is known about the care of *Ameerega petersi*, but the species is kept in small numbers, and the basic figures for the vivarium are known. It is kept like other small *Ameerega* species from the rainforest leaf litter. *Ameerega cainarachi* is closely related, and *Ranitomeya imitator* and *Ranitomeya fantastica* live in the same part of Peru and have similar requirements for humidity and furnishing.

A vivarium of at least 45 × 45 × 45 cm (length × width × height) suits a pair. The male needs room for a territory, and the frogs readily climb a little on roots and branches. Larger is better, especially if the animals are to breed. A rain system and a fogger make it easier to maintain the climate. Glass retains humidity, but the lid or front must have mesh panels so that the air does not stand still.

Build the floor as a bioactive set-up: a drainage layer of clay pebbles or gravel at the bottom, a mesh as a divider and above it a damp mixture of coconut fibre, orchid bark and sphagnum. Put a thick layer of leaf litter on top; it is the frog's natural habitat, retains moisture and provides cover. Springtails and isopods eat waste and are also extra food. Furnish with bromeliads, ferns, moss, cork bark and roots so that there are many hides and broken lines of sight. This reduces conflict between the animals.

Read more: Humidity, misting and ventilation Read more: Terrarium construction and bioactive substrate Read more: Feeder animals: keeping and breeding

TEMPERATURE

The daytime temperature is 25-28 °C, and at night it is lowered by 3-4 degrees to 21-25 °C. The variation over the year is only 1-2 degrees.

Frogs are sensitive to heat: sustained temperatures above 28 °C are dangerous, and an even temperature is more important than the exact figure. Place the vivarium out of direct sun, use a thermostat if the room is too cold, and move it to a cooler room if it cannot be kept below 28 °C in summer. Measure the temperature with a digital thermometer down in the vivarium. Winter rest is not necessary.

Read more: Heat and temperature

HUMIDITY AND MISTING

Humidity must be 70-100 %: close to 100 % morning and evening, preferably with mist, and about 70-80 % around midday. Mist with reverse osmosis or rainwater morning and evening, or use a fogger or rain system on a timer. A last misting in the evening gets hidden feeder insects moving.

Keep the air moving with good ventilation so that mould does not form. If it becomes too dry, the frogs withdraw into hiding and the skin dries out. This can be dangerous within a few days, so raise the humidity at once.

WATER AND WATER QUALITY

A shallow water bowl with 1-2 cm of water is enough. The bowl must be shallow enough for a froglet to climb out of it, and have stones or moss at the edge. Change the water often, and clean the bowl with hot water without soap.

Use reverse osmosis water, rainwater or dechlorinated tap water. Amphibians absorb water and substances through the skin, so avoid soap, cleaning agents and chlorine in the vivarium. Avoid waterfalls with a pump, which can fail and pollute the water.

LIGHTING AND UVB

Provide an LED light with a plant-suitable spectrum for 10-12 hours a day. UVB is not necessary for poison frogs; a weak UVB light (Ferguson zone 1) is optional.

Give the frogs shade and hides so that they can withdraw from the light. Choose a light that does not heat the vivarium noticeably.

Read more: Lighting and UVB

FEEDING

The diet consists of small live arthropods from the leaf litter. In the vivarium use wingless fruit flies (*Drosophila melanogaster* and *D. hydei*), springtails, small isopods, micro crickets, sieved meadow plankton and the smallest waxworm larvae. Springtails and isopods in the vivarium give the frogs something to hunt at all times.

Feed young animals every day and adults three to four times a week with as many flies as they eat in a short time. Dust the food with calcium at every meal and with a multivitamin supplement once or twice a week.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

The males in the genus call and defend small territories. How *Ameerega petersi* behaves in groups has not been described, so a pair is the safest way to keep them. Young animals can be kept together until they become sexually mature; after that conflicts can arise, especially between two males.

Poison frogs should not be handled where possible: the skin is thin and sensitive, and stress weakens them. When cleaning, move the animals with a moistened, clean container, and wash your hands before and after. Never mix species or forms, as this can spread disease and cause stress.

Breeding

SEXUAL MATURITY AND SEXING

The female is usually the largest and plumpest (up to 30 mm against at most 27 mm in the male), and the male is recognised by his call. Sex can be determined only when the animals approach sexual maturity, and the age at sexual maturity is not documented. Keep four to five young animals so that there is a good chance of a pair among them.

MATING

Mating has not been described for *Ameerega petersi*. In the wild the breeding season follows the rain, and the male calls from his territory and lures the female in. In the vivarium a short period of less misting, where humidity falls to about 70 %, followed by heavy misting can set egg-laying going.

EGGS AND TADPOLES

The female lays the eggs on the ground in the leaf litter, under leaves and in small hiding places; a film canister or a Petri dish under half a coconut shell can be used as a laying site. She lays 4-16 eggs per clutch. This figure and the development times under incubation are borrowed from the slightly smaller *Ameerega bilinguis*.

The eggs are guarded, and once they have hatched, an adult carries the tadpoles on its back to water. In the terrarium the tadpoles are moved to small containers with reverse-osmosis or rainwater at 24-26 °C, preferably one tadpole per container. They are fed algae, plant food and prepared tadpole food.

Read more: Incubating eggs

METAMORPHOSIS

The eggs hatch after 10-22 days, and the tadpoles reach metamorphosis after 70-90 days. Once the front legs appear, keep the water shallow, and there must be easy access to land and damp hiding places so the little frogs do not drown. Once the tail has been absorbed, the young frogs are moved to a damp terrarium without deep water.

REARING THE YOUNG

Feed the newly metamorphosed froglets the smallest feeder insects, for example fruit flies of the species *Drosophila melanogaster* and springtails, and later *D. hydei*. Feed them daily, and dust with calcium and vitamins. Keep them damp, and give them plenty of leaf litter and small hides. Young animals can be kept together as long as there is enough space and food; as they approach sexual maturity, they should be divided into pairs.

Health and common mistakes

The care mistakes are the same as in other poison frogs:

- Desiccation: too little humidity causes passivity and dry skin. Raise the humidity, and mist at once.
- Overheating: sustained temperatures above 28 °C are dangerous. Move the vivarium or cool it down.
- Deficiencies: too little calcium, D3 or vitamins cause deformed bones and weak animals. Use supplements at every meal.
- Parasites and fungi: if a frog loses weight despite a good appetite, or there are swellings, redness or sores on the skin, it must go to a vet with amphibian expertise.
- Poor hygiene: clean the water bowl and remove mould regularly, and quarantine new animals before they go in with the others.

Read more: Quarantine and hygiene

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.