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POISON DART FROGS

Ruby Poison Frog

Ameerega parvula

Ameerega parvula is a small, diurnal poison frog of 18-24 mm from the rainforest leaf litter in the western Amazon lowlands and at the foot of the Andes. The back is black with dark red spots, and the underside is marbled blue and black. The species is rarely kept, and little is known about its care.

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

KEY FACTS

THE ANIMAL

Adult size	**18-24 mm** 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	**40 × 40 × 40 cm** L × W × H for 2 adults
Temperature, day	**25-26 °C**
Temperature, night	**20-22 °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 parvula is a small species in the genus *Ameerega*. The male measures 18-23 mm and the female 19-24 mm from snout to vent, so the frog is far smaller than large relatives such as *Ameerega trivittata*. The ground colour is black, and the back is covered with dark red spots. The underside of the body and limbs is black with blue marbling or blue with black marbling, and the pattern continues some way up the sides. An incomplete pale blue stripe begins at the foreleg, runs along the upper lip and ends at the eye or nostril. Newly metamorphosed froglets are blue-black, and some have no spots.

The species was described in 1882 by George Albert Boulenger as *Dendrobates parvulus* and has since stood in several genera. The species name comes from Latin *parvus*, small, and refers to the frog's small size. The closely related *Ameerega bilinguis* replaces it to the north.

Poison frogs do not make the toxin themselves but take up alkaloids from their food in the wild. How toxic *A. parvula* is has not been documented. Captive-bred animals that receive only springtails and fruit flies are not toxic, but wash your hands after working in the vivarium all the same.

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

Distribution and habitat

Ameerega parvula lives in the western Amazon lowlands and on the lowest slopes of the Andes. Most records come from Ecuador, in the provinces of Pastaza, Morona-Santiago, Napo, Orellana and Sucumbíos; the type locality is Sarayacu in Pastaza. The species is also found in northern Peru (Loreto, including near Iquitos and Pebas) and in southern Colombia (Putumayo). It lives from about 150 to 1,000 m above sea level, in a few places up to 1,200 m.

The species occurs in several large protected areas, including Yasuní National Park and Sangay National Park. In the northern Amazon lowlands of Ecuador it is replaced by *Ameerega bilinguis*.

> **Native range:** Colombia, Ecuador and Peru.

HABITAT

Ameerega parvula lives on the forest floor in rainforest on non-flooded mainland (terra firme) and in secondary forest, in the leaf litter and close to brooks. It is diurnal. The eggs are laid on the ground, and the male guards them and carries the tadpoles to water: they are deposited in the calm, shallow parts of small brooks, and shallow puddles, for example in wheel ruts, are used instead when there is nothing else.

The climate is warm and humid all year, and the nights are only a few degrees cooler than the days. Agriculture and cattle farming remove habitat locally, but the IUCN assesses the species as not threatened.

Read more: Rearing tadpoles

Care

THE ENCLOSURE

Little is known about the care of *Ameerega parvula*. The species lives in the same kind of forest as the closely related *Ameerega bilinguis*, which is the same size, and the figures for vivarium, climate and breeding are borrowed from it. *Allobates femoralis* lives in the same forests.

A vivarium of at least 40 × 40 × 40 cm (length × width × height) suits a pair. The species lives on the ground, so floor area is more important than height. A rain system and a fogger make it easier to maintain the climate. Glass retains humidity, and 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 expanded clay pebbles at the bottom, a mesh as a divider and above it a damp, open soil of coconut fibre, orchid bark and sphagnum. Put a thick layer of dried leaves on top, as this is the frog's natural habitat and provides cover. Add springtails and small isopods, which keep the substrate clean and are extra food. Furnish with ferns, moss, root pieces and cork bark so that there are many hides and broken lines of sight. Remove dead leaves and mould.

Read more: Humidity, misting and ventilation Read more: Terrarium construction and bioactive substrate

TEMPERATURE

The daytime temperature is 25-26 °C, and at night it is lowered by 4-5 degrees to 20-22 °C. The species is tied to the even climate of the forest floor and tolerates heat poorly; temperatures above 28 °C are a risk, especially if the air is also still.

The vivarium should not have a hot spot. If the room is too cold, gentle heating of the room or a heat mat on the side of the vivarium can help. Keep the vivarium out of direct sun, and check the temperature with a thermometer down at the floor. Winter rest is not relevant, because the climate has no cool season.

Read more: Heat and temperature

HUMIDITY AND MISTING

Humidity is 70-80 % by day, with a dip to about 70 % around midday, and close to 100 % morning and evening, preferably with mist. Mist the leaf litter and plants thoroughly morning and evening, or use a rain system or fogger on a timer. Keep the leaf litter damp but not waterlogged. Use rainwater, reverse osmosis water or dechlorinated water without additives.

Take care that the air does not stand still: good ventilation panels prevent mould and bacteria. If it becomes too dry, the frogs seek cover and stop eating. A hygrometer down at the floor shows whether the level holds.

WATER AND WATER QUALITY

A shallow water bowl with 1-2 cm of water lets the frogs drink and is necessary if breeding is to take place, because the male deposits the tadpoles there. The bowl must have a slope or stones so that a frog can climb out again. Use rainwater, reverse osmosis water or dechlorinated tap water without additives. Change the water often, preferably every day or every second day, and scrub the bowl so that no coatings form. Amphibians absorb substances through the skin, so cleaning agents, soap and chemicals must not come near the water or the vivarium.

LIGHTING AND UVB

The light should first and foremost give the plants a day-night rhythm of about 12 hours, and an LED plant lamp is enough for that. UVB is not necessary for poison frogs, so it is optional. If UVB is chosen, a weak lamp corresponding to Ferguson zone 1 suits, with plenty of shade and hides to retreat into. The frog lives in the half-light of the forest floor, so the light must not be harsh.

Read more: Lighting and UVB

FEEDING

The food is small, live arthropods: springtails and fruit flies (*Drosophila melanogaster*), micro crickets, sieved meadow plankton and small isopods. The frog is small, so larger feeder insects such as *Drosophila hydei* suit only the adults. Feed young animals daily and adults three to four times a week, and offer as much as the frogs eat in a short time. Dust the feeder insects with calcium at every meal and with a vitamin and mineral supplement once or twice a week.

Springtails and fruit flies can be kept in their own cultures so that there is always food.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

The species is diurnal and lives mostly on the ground. The males call and probably defend small territories, as their relatives do, so a pair is the safe way to keep them in a smaller vivarium. The frog is not an animal for handling: the skin is sensitive, and stress makes the animal susceptible to disease. Move it with a clean, damp cup when cleaning.

Breeding

SEXUAL MATURITY AND SEXING

The female is slightly larger than the male (19-24 mm against 18-23 mm), but the difference is small, so the sex is hard to see. The male is recognised by his call. The age at sexual maturity is not documented. A pair is best secured by keeping a group of young animals together and waiting until two animals pair up.

MATING

The pair goes into amplexus on the ground in the leaves, and the male then guards the eggs. Heavier misting, a slightly cooler night and fresh water changes can set breeding behaviour going. How the species mates in captivity has not been described.

EGGS AND TADPOLES

The female lays the eggs on the ground in the leaf litter, and the male guards them. Once they have hatched, he carries the tadpoles on his back to water. The female lays 4-16 eggs at a time. In the terrarium a film canister or a Petri dish under half a coconut shell can be used as a laying site.

The tadpoles can be raised in small containers with rainwater or reverse-osmosis water at 24-26 °C. They are fed flake food, algae and softened plant food, and the water must be clean. Clean the containers often.

METAMORPHOSIS

The eggs hatch after 10-22 days, and the tadpoles metamorphose after 70-90 days. Once the front legs have appeared, the tadpole must be able to climb out of the water: lower the water level and put an island of sphagnum or a piece of bark in the container. After metamorphosis the little frog spends most of its time on land, and the tail shrinks over a few days. Keep the animal damp and calm, and feed once the tail is gone.

REARING THE YOUNG

The newly metamorphosed froglets are blue-black and very small and take only the smallest feeder insects: newly hatched springtails and wingless fruit flies of the species *Drosophila melanogaster*. Rearing takes place in a small vivarium with damp leaves, moss and hides, and the food is dusted daily with calcium. The froglets can be kept in a group as long as there is enough room for them to go their separate ways. When they can breed is not documented.

Health and common mistakes

No species-specific knowledge of diseases in *Ameerega parvula* exists. The usual problems for poison frogs in vivaria apply here too:

- Low humidity and still air cause dry, stressed animals that stop eating.
- Mould, bacteria and dirt in the vivarium cause skin problems and infections. Remove mould and dead plants, and change water often.
- Lack of calcium and vitamins causes bone disease (swellings, crooked legs, spasms).
- Parasites (for example roundworms and flagellates) show as weight loss despite a good appetite.
- Temperatures above 28 °C are dangerous.

See a vet with amphibian expertise if the frog is thin, sits apathetically or has sores on the 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.