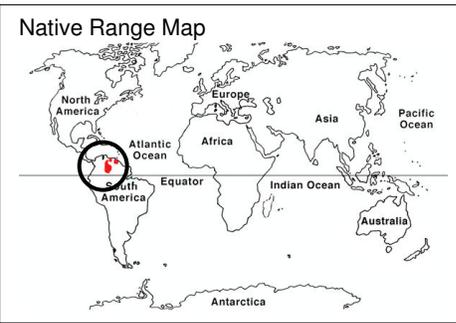


Yellow-banded Poison Dart Frog



Kingdom: Animalia
Phylum: Chordata
Subphylum: Vertebrata
Class: Amphibia
Order: Anura
Family: Dendrobatidae
Genus: *Dendrobates*
Species: *leucomelas*



Photo courtesy of Tony Wisneski

Habitat

- **In the Wild:** The yellow-banded poison dart frog is found in the neo-tropical region that includes Venezuela, northern Brazil, Guyana, and southeastern Colombia. They prefer humid or wet habitats and can be found on forest soil, moist stones, wet tree trunks, and roots of rainforest trees.
- **Exhibit Location:** U.S.S. Antiquities

Characteristics

- The yellow-banded poison dart frog is one of the largest species in this genus, with an adult body length averaging 1.57 inches. Their average weight is 0.11 ounces. Females are larger and more robust than males.
- They have distinctive yellow and black bands across the body. As the frog ages, the black bands often break off into spots. These frogs also have glandular adhesive pads on their toes and fingertips, which help them adhere to plant surfaces, allowing them to climb and cling.
- The bright coloration represents a warning of danger or distastefulness to potential predators. They produce toxic chemicals in their skin, making them poisonous to most would-be predators.
- **Lifespan: In the Wild** 5-7 years; **In Captivity** 10-15 years (record is 20.5 years)

Behaviors

- Yellow-banded poison dart frogs are diurnal (active during the day and rest at night), living mainly on the ground and also climbing into trees.
- Males are very territorial and can be aggressive in defense of a calling/breeding territory. When not breeding, they are solitary. The size of their territory is unknown.
- Males vocalize to attract females during breeding season. Males also use visual cues and show off their colors. They depend on vision to locate prey.
- Tadpoles use vibrations in water to signal their presence in a water pool to adult frogs. If a second tadpole is deposited, the first one will likely eat it.
- **Enrichments at the Zoo:** feeding, moving and changing furniture

Reproduction

- Females reach sexual maturity at 2 years of age. Breeding occurs in February and March, occurring once during the rainy season.
- During the mating season, males use vocalizations such as chirps, buzzes, trills, and hums to get the attention of females. Calling is most intense for an hour or two after sunrise and before sunset. They also show off their brightly colored bodies. Tactile (touching) communication is also important in breeding.
- Females compete for males. After she chooses a mate, she follows him to his chosen breeding ground. She deposits her eggs (2-12 eggs in a clutch; up to 1000 in a breeding season) usually on leaves, in areas of high humidity. Then the male cares for the eggs, keeping them moist. Eggs hatch into tadpoles about 10-14 days after fertilization. He also cares for the hatched tadpoles. The tadpoles ride on the father's back while he climbs up into the forest canopy, where he deposits the tadpoles into one of a variety of water-holding plants. Some reports say that he carries them in his mouth. Bromeliads are ideal for the tadpoles because they have many cup-like leaves filled with water. One tadpole is placed in each pocket

of water. After 70-90 days, tadpoles have fully changed into froglets. They are mature at 12-18 months of age.

Diet

- **In the Wild:** adults: ants, termites, tiny beetles, crickets, spiders; tadpoles: giant damselfly nymphs, other dart frog tadpoles
- **At the Zoo:** adults: pinhead crickets, wingless fruit flies, and froglets; tadpoles receive crushed, flaked fish food and algae

Conservation Status

- **IUCN status:** not listed; **CITES Appendix:** not listed
- Yellow-banded poison dart frogs are poorly known in the wild, but are common in captivity.
- Their numbers in the wild are declining due to exploitation and destruction of their habitat for lumber. They are also collected for the pet trade.
- **Predators:** adults are preyed upon by some snakes, humans (many predators are obviously repelled by the toxic skin secretions); tadpoles are preyed upon by damselfly nymphs

Did You Know?/Fun Facts

- In captivity they lose their skin toxins. (One major source of food in the wild that may provide chemicals to make the toxins is formicine ants.) Skin toxins are very intense and are capable of killing, injuring, or impairing humans if carelessly handled. (They are of no danger if left alone.)
- They are used in medical research because its skin toxins are a possible source of medicine for human diseases.
- The yellow-banded poison dart frog is the only known poison frog to estivate (be dormant or inactive) during the dry season.
- Sexes cannot be told externally except by breeding behavior.
- The young tadpoles are sometimes cannibalistic (eat their own kind) when 2 tadpoles are placed in the same pool.
- Poison dart frogs are also known as poison arrow frogs. They get this name because of the hunters living in the rainforest using the skin toxins on their darts and arrows. Some frogs are more poisonous than others. The toxins come from the ants or other insects they eat in the wild. Captive-bred poison dart frogs are not toxic due to their different diet.

Sources:

- Brennan, L. 2005. "Dendrobates leucomelas" (on-line), AnimalDiversity Web. Accessed October 28, 2005 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Dendrobates_leucomelas.html.
- Walls, J. (1994). *Jewels of the rainforest – poison frogs of the family dendrobatidae*. Neptune City, NJ: T.F.H. Publications, Inc.