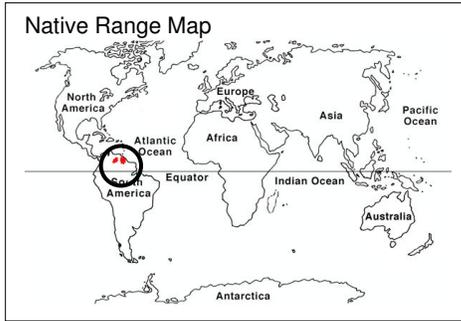


# Dyeing Poison Dart Frog



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



Photo courtesy of Janet Wisneski

## Habitat

- **In the Wild:** The dyeing poison dart frog is a species of relatively low (0-980 or 1300 feet), humid forests of the Guiana's, being found in French Guiana, Suriname, and Guyana on the northeastern shoulder of South America.
- **Exhibit Location:** U.S.S. Antiquities

## Characteristics

- The dyeing poison dart frog is one of the hardier poison frogs and also one of the largest and most brightly colored. It is closely related to the blue poison dart frog and has been hybridized (bred with another species). *D. tinctorius* should be easily distinguished by its yellow stripes or stripe remnants.
- Adults are 34-50 mm (1.34-1.97 inches) long. They have an erect posture and a distinct, round tympanum (eardrum) about half the diameter of the eye. They have greatly expanded finger discs.
- Because of the unusual nature of forests in the Guiana's, often relatively small "islands" of forest being isolated by relatively dry savannahs or high mountain plateaus, no 2 populations of this species are exactly alike.
- Typical specimens are blue-black frogs with strong yellow, yellow-white, or blue-white patterns. Usually the back from the snout to over the tail is yellow, the sides are black and the belly is either black or yellow, with or without a dark or light spotted and reticulated pattern. The second common pattern exhibits a yellow stripe on each side of the back, usually joining with its partner over the vent and over the snout. In either pattern, the limbs tend to be deep blue to black with or without black or even yellow spotting.
- This is one of the species in which the adult color pattern is seen in the late stage tadpole.
- **Lifespan: In the Wild** Unknown, but probably about 5 years; **In Captivity** about 15 years

## Behaviors

- Dyeing poison dart frogs are at home in protected spots in leaf litter and usually quite secretive.
- They are also good climbers and are often found on sides of trees and in heavy vines 1-2 meters (3.28-6.56 feet) above the ground, where its bright yellow stripes stand out in the darkness of the forest.
- Both sexes are territorial and may wrestle to defend the established area.
- Only males vocalize (call).
- **Enrichments at the Zoo:** feeding, moving and changing furniture

## Reproduction

- Females are attracted to a calling male and follow him to a spot of his choice on the forest floor, usually dead leaves in a hidden spot. The female strokes the male's back on occasion, but there seem to be no complicated dances or other mating behaviors.
- The female lays a rather large clutch of 8-10 eggs, sometimes 15, that are fertilized later by the male. After fertilization occurs, the male tends the eggs for the 14-18 days before hatching, keeping them moist and probably fighting off small predators. When the tadpoles emerge, they climb onto the male's back, usually by 1's or 2's, and are taken to a body of water in which they will live for over 2 months. Tadpoles transform in about 10 weeks if they are fed continually.

### Diet

- **In the Wild:** adults: ants; tadpoles: algae, detritus, mosquito larvae, each other
- **At the Zoo:** for 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
- The dyeing poison dart frog is under threat from development of their habitat and over-collecting for the pet trade.
- **Predators:** humans (avoid predation due to their coloration and toxic skin secretions)

### Did You Know?/Fun Facts

- The dyeing poison dart frog was the first poison frog known to Europeans. (It has been written about for over 200 years).
- Its name comes from an old story introduced in Europe with the first preserved specimens of the frog. There were legends that members of various tribes in the Guiana's and the Amazon used animal concoctions (mixtures) of various types to change the plain green feathers of parrots into red feathers. This is a technique called tapirage, and has never been proven true or observed. Supposedly a living frog or a tincture (small trace) of frog skin and blood was rubbed on the selected area of the parrot where a color change was wanted. The parrot had to be young and its original green feathers had to be plucked. When the new feathers grew in, they would magically be bright red or perhaps yellow. In effect, they would have been "dyed."
- 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.

### Source:

- Walls, J. (1994). *Jewels of the rainforest – poison frogs of the family dendrobatidae*. Neptune City, NJ: T.F.H. Publications, Inc.