

# HARLEQUIN TOADS



Genus: *Atelopus*

## BRIGHTLY COLORED

Harlequin toads come in an impressive palette of colors: orange, green, gold, blue, black, brown and even purple. Because of their impressive and vibrant color combos, they're sometimes called "clown frogs."

## FRIENDLY GREETINGS

Some species perform what looks like a "hand" wave to the opposite sex across the river stream, maybe because they can't hear the calls over the roar of the water.

## LONG MATING SEASON

Pairs can be in amplexus (the frog mating hug) for a few weeks, during which time the males often forgo food in their commitment to breed, losing up to 30 percent of their body weight!

## HARD TO SPOT

Many species are hard to see because individuals are spread out in dense forest. But they are quite conspicuous during the breeding season when they all come down to the streams in search of potential mates.



## ON THE SMALL SIDE

The smallest species of harlequin toads measure about an inch in length. Overall the group of toads range in size from that of a human baby's thumb to that of an adult thumb.

Toad Mountain Harlequin frog (*Atelopus certus*) © Brian Gratwicke

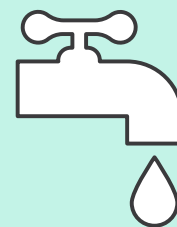
## IMPORTANT INDICATORS OF WATER QUALITY



Because frogs breathe through their skin (in addition to using lungs), they are particularly sensitive to changes in the environment around them.



As a result, the health and presence of harlequin toads and other frogs in streams give us an idea of the quality of the water where they live.



### Why is this important?

Because like canaries in a coal mine, frogs will tell us if there's a problem in the environment before it affects us directly.

## GEOGRAPHIC RANGE

This species-rich genus of Neotropical toads from Central and South America range as far north as Costa Rica and as far south as Bolivia.

**96 SPECIES**  
PLUS MORE UNDESCRIBED

**0-3500**  
meters above sea level

**MORE THAN 75%**  
live in high-elevation ecosystems



## THREATS

The many different species of harlequin toads across South and Central America have at least one thing in common: Many populations have suffered sudden catastrophic declines since the early '80s as the result of a number of threats, with a deadly disease called chytridiomycosis at the top of that list.



Disease



Habitat loss



Climate change



Water pollution

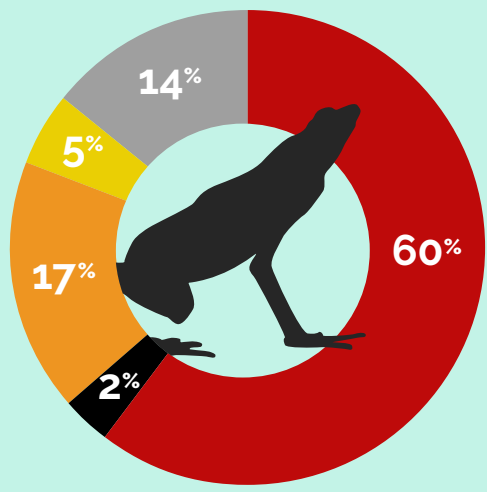


Introduced species



Illegal trade

## HARLEQUIN TOAD CONSERVATION STATUS



- EX** EXTINCT
- CR** CRITICALLY ENDANGERED
- EN** ENDANGERED
- VU** VULNERABLE
- OTHER** NEAR THREATENED/ LEAST CONCERN/ DATA DEFICIENT

Data from IUCN Red List of Threatened Species

## A FUTURE FOR HARLEQUIN TOADS

There is no doubt that harlequin toads are in critical condition. But together we aim to put an end to this extinction crisis.

### REDISCOVERY

In the past 10 years, biologists, indigenous communities and others have rediscovered some harlequin toads that were lost to science or have discovered those lost to science. Field campaigns in search of these new and new populations will help us re-evaluate their current status and develop conservation strategies to protect them.

### HABITAT PROTECTION

The establishment of protected areas and better management of those that already exist will help protect harlequin toads and the other species with which they share their homes, preserving biodiversity in some of the world's biodiversity hotspots.

### RESEARCH SURVIVING POPULATIONS

By monitoring and researching populations of harlequin toads that are surviving or rebounding we can better understand how we might be able to mitigate the threats and save other harlequin toad species from extinction.

### CAPTIVE BREEDING PROGRAMS

Raising and breeding harlequin toads in captivity, while conservationists look for ways to mitigate the threats in the wild, will secure populations for future reintroductions into the wild.

