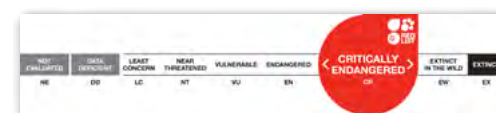


## Panamanian Golden Frog (*Atelopus zeteki*, *A. varius*)

The Panamanian golden frog *Atelopus zeteki* is a species historically found in the region around El Valle de Anton and Cerro Campana. Wild populations of the frog declined precipitously when the frog-killing fungus *Batrachochytrium dendrobatidis* arrived in El Valle in 2006 and the last time this frog was seen in the wild was in 2009. The variable harlequin frog *Atelopus varius* also comes in a golden color form, but ranges much more widely through central Panama and Costa Rica. It has declined precipitously through-out its range but persists in low numbers at a few sites throughout its former range. The main threat to these frogs is the amphibian chytrid fungus, although habitat modification and over-collection for the pet-trade have also been detrimental to golden frogs. Find out more on the [IUCN Red List](#).



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### Key Recommendations

In order to create an action plan for conservation of these two iconic amphibian species in Panama, key individual stakeholders and experts from amphibian conservation research groups, NGOs and relevant government ministries and departments participated in a conservation planning workshop. The participants named the following recommendations as integral to the survival of the species and are currently working to fulfill these recommendations. **Click on the text in the table below to learn more about each recommendation and its corresponding actions.**

<b>Captive Population Management</b>
Create capacity for and maintain sustainable captive populations of <i>Atelopus zeteki</i> and <i>A. varius</i> in Panama, with a business plan in place.
Identify an organizational coordination structure to meet the needs of all stakeholders.
<b>Disease Management</b>
Develop a research plan for in situ mitigation and surveillance of chytrid fungus in the environment.
Develop a chytrid fungus mitigation research program for reintroduction of Panamanian golden frogs to the wild.
Develop studies to understand and meet the nutritional needs of Panamanian golden frogs in captivity.
<b>Communication and Collaboration</b>
Establish a working / coordinating group to drive / lead Panamanian golden frog conservation efforts.
Create and sign an agreement (MOU) to solidify and ensure the commitment of all parties to Panamanian golden frog conservation.
Develop a community engagement / education strategy.
<b>Habitat Management</b>
Identify suitable habitat areas (protected and private) that could serve as golden frog reintroduction sites.
<b>Population Viability Analysis</b>
Identify data needs for the development of population viability models to inform conservation planning.

For further details about these recommendations, view the full workshop report available at <http://www.cbsg.org/content/panamanian-golden-frog-conservation-planning-2014>.

**Workshop convenors:** Project Golden Frog, Association of Zoos and Aquariums Golden Frog Species Survival Plan, Panama Amphibian Rescue and Conservation Project

**Workshop hosts:** El Valle Amphibian Conservation Center, Smithsonian Conservation Biology Institute

**Workshop sponsors:** The Shared Earth Foundation, an anonymous frog-friendly foundation