

Deadly fungus threatens beloved Panamanian frog

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By Mike Power

PANAMA CITY (Reuters) - A deadly fungus is creeping through Panama, killing hundreds of thousands of amphibians and putting the country's national symbol, the golden frog, at risk of extinction, scientists say.

"I would say that the golden frog was already in critical danger, however, the advance of the fungus outbreak makes matters worse to a point that this species is likely to become extinct," said Roberto Ibanez, an amphibian expert at the Smithsonian Tropical Research Institute in Panama.

The rare golden frog is a much-loved national emblem that graces Panama's lottery tickets and tourist brochures. Schoolchildren are taught the story of the frogs, which, according to pre-Columbian folklore, turn to gold upon death.

Panamanians believe that people who see the frog alive will be blessed with good luck.

The mysterious mold threatening the frog is spreading quickly in Panama, according to a report published by Southern Illinois University on Monday. It grows over the animals' skin, sealing it up and effectively choking them to death,

"Many frogs use their skin as we use our lungs. If it gets blocked up, they die," said zoologist Karen Lips at Southern Illinois.

A separate study published last month in the science journal Nature cited global warming as a probable cause for the proliferation of the fungus.

The frog is regarded by conservationists as being critically endangered with an 80 percent decline in its population predicted over the next 10 years.

A bright orange-yellow color with black spots, the golden frog is little studied due to its scarcity. It has no eardrums and communicates by a mysterious semaphore-like system of leg and feet gesticulations.

"We don't have actual numbers on population size. Such figures are notoriously difficult to confirm," said Ibanez. "But the fungus has the capacity to completely wipe out populations of any size, and if the fungus doesn't kill them, the areas where they can be found are being deforested and polluted or developed," he said.

ALREADY ENDANGERED

Researchers from Southern Illinois say the fungus, which causes the infectious disease chytridiomycosis that affects amphibians, arrived in Panama in 1993 and was detected in El Cope, an area near the Caribbean with many frogs, in October 2004.

Within four months, it had wiped out 57 out of a total of 70 frog, toad and salamander species, including many golden frogs, in the area.

"The golden frog is already endangered because of habitat loss and collecting for the pet trade," Lips said.

"It was one of the species we found dead and infected with the fungus at El Cope. As far as we know, every species at the site was probably infested with it and died," she said.

The fungus exists in much of the world and the Panama study is the latest example of its potential to wipe out entire amphibian populations.

Scientists do not know where the fungus came from, but it has been spreading through the Americas, Australia and Europe since 1970. Its first documented appearance was in South Africa in the 1930s, Lips said.

"The amphibian fungus kills not only one species, but can also kill species from across the amphibian taxonomic range," said Peter Daszak of the Consortium for Conservation Medicine in New York, which studies links between environmental change, health and biodiversity.

"It's as if we came across a disease that regularly kills everyone in a city, but also dogs, cats, horses, whales, bats and so on. It's a very unusual pathogen, with an incredible impact."