

STRANGE FUNGUS KILLS DARWIN'S FROG IN CHILE

Contributed by Line Gylling
Tuesday, 23 September 2008

Chile's endangered Darwin's Frog

With its mouth full of youngsters, Darwin's frog is definitely one of a kind — indeed no other frogs show this peculiar behavior of incubating tadpoles in their mouths. But like many other amphibians, the unique species is threatened, both by environmental changes and a strange fungus that is causing populations to decline worldwide. “The current rate of amphibian extinction is about 211 times that of historical extinctions,” said biologist Martha Crump during a recent symposium hosted by Chile's Universidad Católica. Crump is a professor at Northern Arizona University.

Darwin's frog is stated as vulnerable but can still be found in southern Chile and Argentina. Its uniqueness manifests in the males protective behavior of incubating the eggs in its vocal sac during a period of two months, after which the hatched tadpoles leave the mouth.

Like other frogs and toads, the Darwin's frog is being affected by both habitat change and a fungus called Chytridiomycosis. Frogs and toads breathe partly through their skin and as the fungus infects the skin of the animals, it causes them to suffocate.

“The fungus usually lives on plants. But now it is specialized in attacking frogs also and it is out of our control,” said Dr. Klaus Busse from Museum Koenig.

Some observers suggest time may be simply running out for the world's amphibians, which evolutionary speaking are ancient creatures. Crump refuses to believe that.

“It is the first time a whole class of animals is changing in numbers world wide and it is not natural,” she said. “We do not know how flexible the ecosystem will be to these changes or what consequences it will have if the amphibians should disappear — we can only speculate.”

Santiago Zoo is currently running a breeding program supported by Atlanta Botanical Garden. Scientist Danté Fenolio from the organization admitted that the program is not a guarantee to save Darwin's frog because the fungus problem still remains, but he is optimistic.

“As a minimum, the scientists at Santiago Zoo will obtain good information about the genetics of the frog,” he said. “This could be of great help in the future, especially if reintroduction programs are needed.”

By Line Gylling (editor@santiagotimes.cl)