

# Underestimation of frog numbers causes concern

October 31 2007

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Frogs are vanishing from all the world's ecosystems with unprecedented speed. It is thought that more than 100 species have died out since 1980 alone.

In a paper published in the online, open-access journal PLoS ONE, a team of experts, including researchers from the University of Canterbury, says the number of species has been strongly underestimated and they are calling for action.

The researchers from France and New Zealand collected and collated more than 500 DNA sequences, including 60 previously recognised species, occurring in the Guiana Shield, which harbours the largest continuous tract of virgin tropical rainforest.

This region of Amazonia comprises French Guiana, Suriname, Guyana, eastern Venezuela and northern Brazil.

PhD researcher Antoine Fouquet says the samples revealed an astonishing level of cryptic diversity, with the number of species identified potentially two-fold greater than previously thought.

Antoine says such underestimation of amphibian diversity has broad implications for the management of biodiversity, and particularly that of many Neotropical amphibians which are considered highly threatened.

He says frogs are the "canaries in the coal mine" and their current

decline is regarded as an indicator of the environmental crisis.

"Given the unique evolutionary history of the Guiana Shield region, and its nearly pristine condition, it is critical that there is greater understanding of its frog species."

Source: Public Library of Science

Citation: Underestimation of frog numbers causes concern (2007, October 31) retrieved 2 May 2024 from <https://phys.org/news/2007-10-underestimation-frog.html>

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