

Saving frogs before it's too late

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With nearly one-third of amphibian species threatened with extinction worldwide, fueled in part by the widespread emergence of the deadly chytrid fungus, effective conservation efforts could not be more urgent. In a new article in the open-access journal *PLoS Biology*, Franco Andreone and his colleagues argue that one of the best places to focus these efforts is Madagascar, a global hotspot of amphibian diversity that shows no signs of amphibian declines—or traces of the chytrid fungus.

Protecting this amphibian treasure trove before it's too late, the authors argue, makes Madagascar a top priority for amphibian conservation efforts. "In Madagascar," the authors argue, "amphibian conservation efforts have the possibility of being pro-active, rather than reactive, or simply post-mortem."

Madagascar harbors "one of the richest groups of amphibian fauna in the world," write the authors, but this megadiversity faces significant threats. Ninety percent of the island's original vegetation has been destroyed by human activity. Amazingly, despite the ongoing habitat destruction, no Malagasy amphibian species have been reported as extinct, though a quarter of the 220 species evaluated by the World Conservation Union are listed as threatened.

The conspicuous absence of the devastating chytrid fungus only serves to underscore the precariousness of the situation. Intensive conservation efforts here, the authors argue, could "avert an otherwise predictable catastrophic loss of biodiversity."



Pro-active conservation programs in Madagascar are especially timely in light of the government's stated commitment to protect its biodiversity. This political interest, sparked by a 2003 presidential announcement to triple the size of Madagascar's network of protected areas, gave rise to multiple processes for developing conservation strategies, including the Madagascar Action Plan. All these efforts suggest very favorable conditions for protecting what the authors call "astonishing morphological and ecological diversity" in a country where intact amphibian diversity may still benefit from intensive pro-active conservation measures.

Ironically, Andreone and his colleagues argue, Madagascar's pre-decline status could actually hinder timely conservation action. The authors urge the international conservation community to recognize the unique opportunity Madagascar presents for conserving global amphibian diversity by making the necessary investments to implement conservation initiatives. No one knows if or when the chytrid fungus may turn up on the island. The authors advocate "urgency rather than complacency" to preserve this sanctuary while we still can.

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