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Conservation status of the golden mantella frog in eastern Madagascar: how do protected areas contribute?



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Introduction

The Golden Mantella frog (*Mantella aurantiaca*), is Critically Endangered (CR) and found only in the District of Moramanga, Alaotra Mangoro Region in eastern Madagascar.



Fig. 1 *Mantella aurantiaca*, golden Mantella, Sahona mena (in Malagasy)

Mantella aurantiaca is subject to habitat degradation due to slash-and-burn agriculture, conversion of breeding ponds into rice fields and legal or illegal mining, and international trade.



Fig 2: The conservation strategy plan for *Mantella* (Randrianelona et al. 2010).

A conservation strategy was developed for *Mantella aurantiaca* in 2010, Principal recommendations included :

- *Habitat protection and restoration*
- *Relocation of frogs at ponds affected by legal mining*
- *captive breeding*

Methods

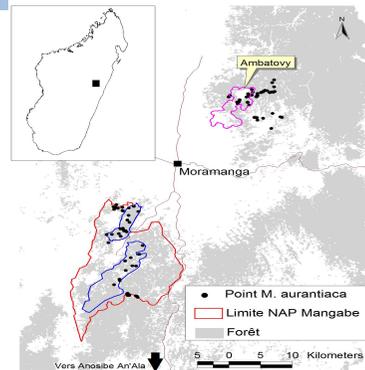


Fig 3: Location and Distribution

Data collected by Madagasikara Voakajy over the past three years suggest that golden mantellas do not use all available ponds within their distribution area for breeding.



Fig 4: Direct observation of *Mantella aurantiaca*

Between November and March (breeding season), the presence/absence of golden mantellas in each sampled pond (215 ponds) was confirmed by direct observation of one or

Results

Potential breeding ponds occur in three isolated areas:

- 59% (n=127) in Mangabe new protected area
- 32% (n=70) in Ambatovy zone
- 9% (n=18) in Torotorfotsy and CAZ

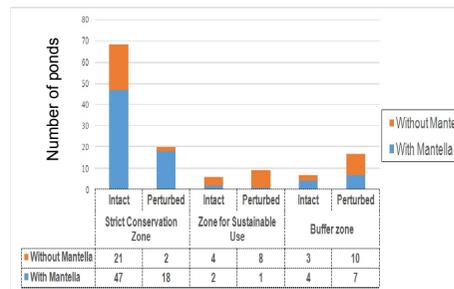


Fig 5: Status of NPA Mangabe ponds

79 ponds in the Mangabe area are occupied by *Mantella aurantiaca*; About 65 ponds occur in the strict zone of conservation.



golden mantella ponds:



ponds are affected by agricultural activities, e.g. slash-and-burn agriculture, rice fields and illegal mining.

Conclusion

The updated distribution of ponds occupied by *Mantella* and these results highlight **THE IMPORTANCE OF THE CREATION OF MANGABE NEW PROTECTED AREA** for sustainable conservation and development.

The Challenge

- Obtaining the definitive protection status for Mangabe
- Engaging local communities in sustainably managing Mangabe new protected area
- Addressing illegal gold mining and reduce the slash and burn practice
- Promoting the sustainable use of species

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