



Figure 3 : The Participants receiving certificate during Chytrid training in October 2011, at Ivoloina Conservation Training Centre, Toamasina.

workshop MFG was identified as one of the institutions for captive breeding an ‘analog’ frog species to gain more experience. *Boophis tephraeomystax* was selected as the species and in March 2011 5 individuals were captured in Parc Ivoloina for placement in our renovated enclosure.

MFG is committed to continue working with its partners on amphibian conservation in both Betampona and Ivoloina in the future.

MFG is grateful for the support of the Wildcare Institution of the Saint Louis Zoo and EAZA for their funding and support with regards to our amphibian conservation efforts.

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Species Conservation Strategy for the Golden Mantella Launched in Madagascar

By Richard K. B. Jenkins & Roma Randrianelona

The golden mantella frog is a Critically Endangered species that is endemic to a small area in eastern Madagascar (Randrianelona et al. 2010). It used to be traded in large numbers but improvements in management procedures for CITES species in Madagascar, and the availability of captive bred individuals, has led to a decline in exports over the last decade. The golden mantella frog breeds in ephemeral ponds in humid forests and the main threat to this species nowadays is the destruction of these habitats. A conservation project was launched in 2008 to provide protected area status for the Mangabe Forest, which contained over 50% of the known breeding ponds for the species. Other breeding ponds for this species occur in sites that are managed by international NGOs, national NGOs and a large mining company. Whilst progress was made in obtaining provisional protected area status for the Mangabe Forest, it became clear that the species needed a single conservation plan to weave the different stakeholders together to promote coordinated actions for the benefit of the frog.



Critically Endangered Golden Mantella frog - in a battle to survive in the wild. Credit: R. Randrianelona/ Madagasikara Voakajy.

Madagasikara Voakajy and the Amphibian Specialist Group, supported by key partners, produced a Species Conservation Strategy for the golden mantella frog in 2010. The approach followed the IUCN guidelines on Species Planning (www.cbsg.org/cbsg/content/files/scptf_handbook.pdf) and included the participation of all stakeholders in a workshop and a clear set of goals-objectives-actions. With a varied stakeholder community,

including CITES authorities, community based organizations, NGOs and the extraction industry, it was extremely useful to generate a consensual strategy and set of actions for a five year period. A similar approach would certainly be useful for conserving some of Madagascar’s other CR amphibian species. The final Species Conservation Strategy was launched by the Minister of Environments and Forests in February 2011.

The availability of a Species Conservation Strategy alone does of course not confer a significant impact on conservation because success depends on its implementation. Some of the key actions

in the golden mantella Species Conservation Strategy are now being implemented at Mangabe thanks to support from donors including the Rufford Foundation and the BBC Wildlife Fund. In the last two years there has been a major increase in illegal gold mining in the forests inhabited by the golden frogs. The artisanal mines cause serious damage to rivers, ponds and the

forest and are often situated in the same localities as the golden mantella breeding ponds.

Support from Conservation International has enabled Madagasikara Voakajy and the authorities concerned to provide additional assistance to communities in Mangabe, including regular patrols by armed gendarmes. The results so far are encouraging but limited; on the positive side the communities in the forest are grateful for the patrols and these have led to an

overall reduction in illegal mining in Mangabe, but on the negative side, lucrative gold mining is worth the risk for the miners and they usually return to the same site, or move to another after the patrols have passed. Three ponds were destroyed by illegal miners in Mangabe between November 2010 and February 2011 and with no more than 50 golden mantella ponds known in Madagascar, a continued conservation presence is essential for the survival of the species. This is especially pertinent given the planned extraction of nickel at the Ambatovy mine near Moramanga where a number of breeding ponds are scheduled to be heavily impacted. Continued conservation by communities new protected areas, reinvigorated law enforcement at Mangabe and an ambitious mitigation strategy at the Ambatovy mine will go a long way to conserving the golden mantella frog in the wild.

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Ankarahabe: golden mantella breeding pond in Mangabe forest that was destroyed by gold miners in 2010. Credit: R. Randrianelona/Madagasikara Voakajy.

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Ankaratra massif: Highland focal amphibian site for conservation.

By H. Rahantaisoa, M. Rakotomalala, Falitiana C. E. Rabemananjara, J. Rahantamalala & N. Rabibisoa

The Ankaratra massif is a high mountain region situated at the central highland of Madagascar (Fig. 1). This massif has two types of forest, rainforest (Fig. 2) and *Pinus* forest. It is an area that has been included in the State's Forestry Station system since 1960 for its importance to water sources and biodiversity. Due to the presence of the critically endangered amphibian species, *Mantidactylus pauliani* and *Boophis williamsi*, this region is one of the high priorities for conservation in the new System of Protected Areas in Madagascar and lead to its classification into the Alliance of Zero Extinction (Langaha, 2010). In addition, this area is the only remaining forest within



Figure 1: Ankaratra map



the high central mountain zone of Madagascar with a unique ecosystem and water resource, and is home to treasures like *Lygodactylus mirabilis*, a critically endangered gecko endemic to the area (Glaw and Vences, 2007). Thus, the preservation of the site and associated species recovery plans are being implementation through a management plan produced by VIF (Vondrona Ivon'ny

Fampandrosoana, association focusing on the community development) with Conservation International last year.

It is evidence nowadays that climate change can modify the