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Boophis pyrrhus. Photo by: Jörn Köhler



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Awareness and Citizen-based Initiatives in Madagascar Boost the Conservation of its Endemic Amphibians

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Fig. 1. The carnival on the occasion of the “Tomato Frog Festival” in Maroantsetra.

The activity of the IUCN SSC Amphibian Specialist Group (ASG) Madagascar has been constantly improved in the last years through a series of actions, including field research, implementation of the technical support to Malagasy Protected Areas, establishment of a website (www.sahonagasy.org) and wide collaborations with other stakeholders. Among the other things some projects were also the object of special attention and included extended awareness and citizen-based initiatives.

Talking about amphibian conservation is not an easy task, and this is especially valid in a country, like Madagascar, which is chronically affected by economic and political problems, and where daily subsistence is obviously the priority task for the majority of inhabitants. Discussing about the conservation of the approximately 300 described endemic frog species (and many other still undescribed ones) may appear somehow provocative when facing basic

and urgent health, alphabetization and development needs. But it is also evident that the conservation and valorization of Madagascar’s extraordinary biodiversity are among the main directions and opportunities to generate economic and welfare revenues. Amphibians are among the most astonishing organisms in Madagascar, with an exceptional diversity and species richness: explaining and divulging why this frog diversity is so important to highlight the environment conservation is a mandatory task and a great defy for all the conservationist community.

The activity in terms of awareness increase and sensibilization has been quite intense for the ASG, whose members recently also associated themselves in an independent association, named SCAM (Société pour la Conservation des Amphibiens à Madagascar) Sahonagasy (“sahona” means frog in Malagasy, and “gasy” is an abbreviation for “Malagasy”).

Beside the publication of a series of popular booklets, written in several languages, including Malagasy (1, 2) some general events, addressed to the general public, were organized in the last years at several locations, sometimes structured as celebrative events. Here we resumed the most relevant ones.

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Celebration of the Tomato Frog Festival in Maroantsetra

On 13th and 14th June 2009, ASG in collaboration with the Madagascar Fauna Group organized a celebration of the Tomato frog, *Dyscophus antongili*, a colorful living in the town of Maroantsetra, NE Madagascar. This was the first celebration dedicated to an amphibian within a town and not within pristine (or presumed so) forests. This was done on the occasion of the inauguration of the "Tomato Frog Village" which aims protecting some of the most relevant frog populations in Maroantsetra (3). More than 800 persons participated, including a march through town. The "College Zanatany Maroantsetra" hosted the event, with lots of enthusiasm. The weekend program included "frog races", drawing competitions, frog calls and traditional dancers disguised in frogs (Fig. 1).

The amphibian conservation project in Ankaratra

The project carried out on the Ankaratra Massif is aimed to safeguard the threatened amphibian species living there, including two micro-endemic and Critically Endangered montane stream frogs *Boophis williamsi* and *Mantidactylus pauliani* (4). This project started on 2010 for three years at the first stage and we hope to continue the surveys for the next five years to insure that the conservation activities have positive impact on these species.

Most of the activities are currently under the umbrella of the mayors of Tsiafajavona Ankarata and Sabotsy Namatoana villages, including eight chiefs of local *Fokontany* (basic administration unit of the municipality), local-based population Association called VOI ("Vondron'Oloha Ifotony") and the forestry agents. As consequent fallout, the impact of the conservation program on local communities lowered illicit logging and charcoal exploitation. The people that make the major destruction of the forest are still not sensitized. In the Ankaratra Massif, the well-known political events of 2009 and turmoil accelerated the habitat degradation touched large parts of the exotic pine forest planted for the protection of hills' crests and slopes. Luckily, large parts of the original altitude rain-

forests are still intact and permit the refuge of the amphibians.

In terms of public awareness, the VIF (Vondrona Ivon'ny Fampanandroana) association realized some leaflets written in Malagasy dealing with the local extraordinary biodiversity, the environmental degradation and the need of restoration activities involving all the stakeholders, especially the local based Association called VOI. These leaflets were distributed to the local populations and schools after sensitizing made by the forestry agents and VIF responsables.

Finally, some celebrations called *hiragasy* (Malagasy traditional songs and talks) have been organized on 22nd September 2012. The theme of these encounters dealt with the environmental protection and the biodiversity, coping with the traditional cultures and beliefs which are still very important at this area. Three groups of Malagasy traditional singers (or "Mpihira Gasy") showed their talents provoking the public enthusiasm when hearing them talking about the presence of the "elders" who are the main protectors of the traditional habits and customs, the biodiversity and especially the threatened Amphibians *Boophis williamsi* and *Mantidactylus pauliani* (Figure 2).

The local involvement concerns the patrol led by the "elders of the massif" (named "Ankaratra Tsy Rava Fenitra") and the Forestry and Environmental Survey Committee called KASTI ("Komitin'ny Ala Sy Tontolo Iainana"). Each survey consists of looking at all the illicit practices and sensitizing of the people.

Saving the Harlequin Mantella in Antoetra Region

The Antoetra site named Fohisokina (or Vohisokina) is one of the most important locations of the rare and Critically Endangered Harlequin mantella, *Mantella cowanii*. Until 2003 this anuran was regularly exploited for the international pet-trade and subject to illegal trade after this period. Conservation International (CI), ASG Madagascar, Man and the Environment (MATE) and local community-based association "Fohisokina Miaro ny Sahanamena" collaborated in the last decade for the species and habitat conservation by realizing the first protected area for *M. cowanii*.

Thanks to implementation of public awareness and local population involvement, significant results were achieved on the species and habitat conservation. As an example, illicit bushfires are virtually absent in the Fohisokina core area and the collection of species collection has stopped. Patrol and monitoring are still being done by local community-based trained people with the direct implementation of ASG and MATE through financial support of CI.

In such a context, many communication and awareness tools were used to augment public consensus, mainly focusing on conservation of *M. cowanii* and its meaning for local communities and nearby habitat. Moreover, the major target of this action was to sensitize local population about the importance of this species in terms of endemism and tourist increase.

These were some of the major events done to support the *M. cowanii* project: (a) in 2008 - during the "Year of the Frog" - *M. cowanii* was used



Fig. 2. A group of local guides of Soanierana is singing about the importance of the environment and the biodiversity inside the Ankaratra massif, narrating the history of the CR species *Boophis williamsi* and *Mantidactylus pauliani*.

as a nature flagship (i.e., realizing dedicated stickers, leaflets, etc.); (b) a “joro” (a traditional benediction to invoke the “razana”, the ancestors) was celebrated in 2010 to protect Fohisokina sites against evil and bad luck and a festival with all stakeholders was subsequently done; (c) three thousands popular leaflets were published in French, Malagasy and English, illustrating the species, its morphology, biology, distribution and its ecological value and the conservation programs; (d) 1,000 booklets dealing about the history of Fohisokina were realized and distributed to local schools (5); (e) 200 tee-shirts were branded and dispatched to local communities (Figures 3-4); (f) several explicative panels were placed in a frequented places (i.e., Office of the Rural Commune of Ivato, fairs, hotels in Antoetra and in Fohisokina); (g) footage showing the activities and conservation effort done in Fohisokina was distributed to Malagasy broadcasting radio stations, national TV channels and daily newspapers.

Further example of the impact results of such a sensibilization event was if a bushfire occurred around the site all of the community rush to help put out the fire. The bushfire is especially accident cause to supply the new germination of the herbs for the food of



Fig. 3. A traditional benediction to invoke ancestors and get acceptance from all local stakeholders to conserve the Fohisokina site.

the zebu.

Currently in 2013, no collections, no gold mining, no fire are present in *M. cowanii* habitat. Due to our effort and all stakeholders during the last three years all of the people around Fohisokina even though the town of Ambositra are aware of the presence of *M. cowanii* in his region.

References

1. F. Andreone, M. Bungard, K. Freeman. Ireo sahona tandindomin-doza eto Madagasikara (Museo Regionale di Scienze Naturali, Antananarivo, 2009).
2. F. Andreone, M. Bungard, K. Freeman. Amphibiens menacés de Madagascar (2ème édition). (Museo Regionale di Scienze Naturali, Antananarivo, 2008)
3. Anonymous, Eighth Continent Quarterly. *The Newsletter of the Madagascar Fauna Group* (Summer 2009), 4 (2009).
4. M. Vences, F. Andreone, F. Glaw, N. Raminosoa, J. E. Randrianirina, D. Vieites, *Italian Journal of Zoology*, 69, 263 (2002).
5. N. Rabibisoa. Ny ela manova raha (Conservation International, Antananarivo, 2011)

Fig. 4. T-shirts with the logo depicting the Harlequin mantella.

