

## **PROJECT REPORT**

# **PROMOTING NATIONAL PUBLIC AWARENESS IN BIODIVERSITY CONSERVATION AT LAKE TSIMANAMPESOTSA NATIONAL PARK, MADAGASCAR**

By

**Sama Zefania**

Department of Biology Animal, University of Antananarivo, Po Box 906, Madagascar  
Phone +261 20 32 40 21336 (phone), samazefania@yahoo.fr (email)

ANGAP Toliara, Po Box 400, Madagascar

### **Project executive summary**

Tsimanampesotse National Park is one of promoting park appointed by the “Association Nationale pour la Gestion des Aires Protégées” (ANGAP) and World Wide Fund (WWF) for nature Toliary in Southern ecoregion of Madagascar. We carried out with them this African Bird Club (ABC) public awareness programme at Tsimanampesotse. We established together posters and brochures in three languages (Malagasy, French and English) for tourists and local people living around the Park. The message on poster was “Tsimanampesotse National Park, our natural inheritance, the only one of the world”. I produced 100 posters A3 in three languages, 500 brochures A4 in two languages (English and French). I distributed these posters and brochures in two famous tourist hotels in Toliary (Chez Lala and Chez Philip) where tourists who want to visit the South of Toliary (Anakao, Tsimanampesotse, Itampolo) accommodate and check their visit. I distributed also these brochures and posters in two travel agencies (Compagnie du Sud and Chez Philips) through them most of tourists travelled by boat and renting car to visit some tourist sites in the south west of Madagascar. I put also these brochures and posters in Efoetse village where local ANGAP office manager of Tsimanampesotse National Park stayed and tourists should pass before visiting the Park. Some tourists pass at Ambola village to get facilities from two other hotels called “Vahombe” and Philips, where we distribute also these brochures and posters. I visited five main villages along the west part of the Park including Efoetse (S24°04.8496' E043°41.9988'), Marofijery (S24°02.5795' E043°41.6947'), Ankilibory, Maromitiliky (S24°06.7298' E043°41.9367') and Manasy (S24°09.9874' E043°43.6005'). On each village, I organised a meeting to local people for an awareness presentation of 3or 4 hours on evening when people came back at home from their field. This presentation, which was taken place near the chief of quarter of each village, included three programmes: one hour of video session using local music to call people, one hour of wildlife film (BBC film from website) and a finale session for explaining to people the content of poster and brochures. Most of people cannot read, we have to explain and show on

poster the biological value of the Park. In addition, I visited and distributed poster to some people in the village of Soarano when most of people were not there during my visit. This awareness programme at Tsimanampesotse National Park will be continued, improved and reinforced with ANGAP team. As the analphabetic rate is very high in local village around the Park, the ANGAP Efoetse has gotten a very large television, which will be used for raising awareness. We will continue to improve, product and distribute posters and brochures to some hotels, Cyber café and airport in Toliara and some hotels in Anakao. We plan to add these brochures and posters by using biodiversity film from the Park. In addition, a monitoring programme was developed with ANGAP Toliara and some application was pending to reinforce capacity of local ANGAP Personnel in field wetland bird identification, census and monitoring.

## **Introduction**

We promoted a public awareness project at Tsimanampesotse National Park between July and September 2007. This project was funded by the African Bird Club and co-funded by ANGAP and WWF Toliara.

We interested to promote public awareness at Tsimanampesotse National Park for some reasons:

- The important biological value of this Park.
- The need to make aware people that Madagascar plover population is predicted to decline rapidly using optimistic scenarios.
- The increasing number of tourists visiting the Park without available information such as brochures and posters concerning the exceptional biodiversity of the Park.
- The need to reinforce the capacity of local ANGAP personnel in surveying bird population of the Park.

## **Aims**

The aims of this project were to increase the knowledge of local people and tourist visitor about the biological value of Park and reinforce capacity of local ANGAP personnel on wetland bird identification and survey.

## **Methods**

I used approach method to link this awareness project with the manager of Park and local people:

- Approach to the Manager of Park: I edited the awareness material (posters and brochures) with ANGAP and WWF Toliara team, manager of the Park, in order to link and add new dimensions of this project according to their awareness-raising programme in Tsimanampesotse National Park.
- Approach to the local people: We produced poster in local dialect, and I meet local people and chief of quarter of each visited village for explaining them the poster and brochures because most of people can not read. I used « Accelerated participatory research method » (Gueye and Freudemberger 1991) during this project. I called people

to come on the meeting by using biodiversity video film and local music. I considered any playback from the people after and made ANGAP manager of Park to be aware about their request and idea concerning the Park. I called the local people to help ANGAP in conservation of Park and to do not disturb this exceptional wildlife of Tsimanampesotse National Park. I left some copies of posters and brochures to the President of quarter, teachers and for some people who can read in each visited village.

### **Study site**

I worked on the villages near the Lake Tsimanampetsotsa (S 24°03.00' - 24°12.00' E 43°43.00' - 43°51.00'), a National Park and Ramsar site, which found in the south west of Madagascar, province of Toliara (Figure 1 on annex). I visited five villages along west side of Park during this awareness project:

### **Activities and results**

This project was developed according to the awareness programme of ANGAP/WWF manager of Park. Public awareness was made and still continues to develop within ANGAP programme at this Park, when monitoring programme for reinforcing capacity will be developed from December 2007.

#### ***Establishing poster and brochures***

In this public awareness project, I choose the species and general idea to include in posters and brochures. I choose some particular species regional endemic in southern ecoregion of Madagascar and local biological value of Tsimanampesotse National Park. These species are:

- The Grandidier's Mongoose *Galidictis grandidieri* (Endangered, UICN 1994), which only occur within the borders of Tsimanampesotse.
- The blindfish *Typhleotris madagascariensis* (preoccupation minor, CAMP 2001), restricted in cave underground of Tsimanampesotse.
- The Ring tailed lemur *Lemur catta* (Vulnerable, UICN 1994), which are specific of southern Ecoregion of Madagascar, female dominant, sexual maturity of juvenile is from 3 years.
- The Radiated tortoise *Geochelone radiata* (Vulnerable, UICN 1994), restricted range in southern Ecoregion of Madagascar, 15-20 kg, surviving up to 188 year old.
- The Madagascar plover, *Charadrius thoracicus*, (Vulnerable, BirdLife 2004), occurring west cost of Madagascar, Tsimanampesotse is their important breeding site, 30-40 g (body weight), population was predicted to decline rapidly within twenty years using optimistic scenarios.
- The Greater flamingo, *Phoenicopterus ruber*, common in Madagascar but Tsimanampesotse is the only one secure breeding site recently confirmed for the species.
- The Baobab, *Adansonia rubrostipa* is among the interesting endemic baobab of Madagascar.

We developed together the content, message and photo to be edited. WWF Antananarivo improved and made better the content of these posters and brochures until we can print them. We addressed these three messages in the posters: “Tsimanampesotse National Park, our natural inheritance, unique in the world. We noted three other messages in the poster:

- Tsimanampesotse National Park is for the people who live around the Park;
- The Park contributes to social and economic development programmes in surrounding communities;
- Fauna and flora of the Park are unique in the world; let us work together to protect them.

In brochures, we noted some guideline for acceding to the Park in addition to the species.

The posters and brochures were produced in three useful languages of country: Malagasy local dialect, French and English.

### ***Producing and distribution of posters and brochures***

We printed 100 posters format A3 in three languages (Malagasy local dialect, French and English), and 500 brochures format A4 in two languages (French and English). The posters were plasticized. I attached in annex the poster and brochure in English language (please see figure 2).

These brochures and posters were distributed in hotels and travel agencies in Toliara and villages around the Park. Our target people are tourists’ visitors and local people living around the Park. I displayed these posters and brochures:

- In two famous tourist hotels at Mahavatse quarter in Toliary: Hotels Chez Lala and Chez Philips, where tourists lodge before visiting the tourists’ sites in south of Toliara.
- In two famous travel agencies in Toliary: Compagnie du Sud and Chez Philips, where tourists checked and arranged their travel to visit Anakao, Tsimanampesotse and Itampolo.
- In the ANGAP office at Efoetse village where tourist visitor passed before visiting the Park.
- In two hotels at Ambola village (near of Efoetse village), Hotel Vahombe and Hotel Philips, where tourists passes sometimes before or after visiting Tsimanampesotse.
- In five villages along the west side of the Park, which are, from north to south, Ankilibory (S23°59' E043°41'), Marofijery (S24°02.5795' E043°41.6947'), Efoetse (S24°04.8496' E043°41.9988'), Maromitiliky (S24°06.7298' E043°41.9367') and Manasy (S24°09.9874' E043°43.6005'). I visited also Soarano village (S24°11.3533' E043°46.1047') and displayed there some posters, when most of people were not there during my visit. I met 30-60 people per village during this awareness programme.

### **Future work**

I still continue to work with ANGAP/WWF Toliara on:

- Raising awareness at Tsimanampesotse National Park, our plan is to improve the poster and use video system more likely efficient for local communities where the alphabetic

- rate are very low. We intend to reinforce the awareness program and expand this to the others villages around the Park and Toliara (airport, Cyber café, University).
- Reinforcing capacity on wetland bird survey and monitoring: programs with ANGAP/WWF Toliara will be started on next step of this project (December 2007), and another funding application was pended for this work.

## **Conclusion**

This raising awareness project is very useful to maintain and increase the knowledge of tourist visitors of Park and local people living around the Park about the biological values of Tsimanampesotse. The message was transferred successfully to the target people (tourist visitors, hotels, local villages around the Park), who were very happy to see photo of animals and get copy of posters, and wish to develop this awareness programs more largely than. Local people appreciated well the approach using video film and local music. Number of tourist visitors of Park and searchers continue to increase and we wish that the threat on habitat and fauna from local human activities would be decreased.

## **Acknowledgement**

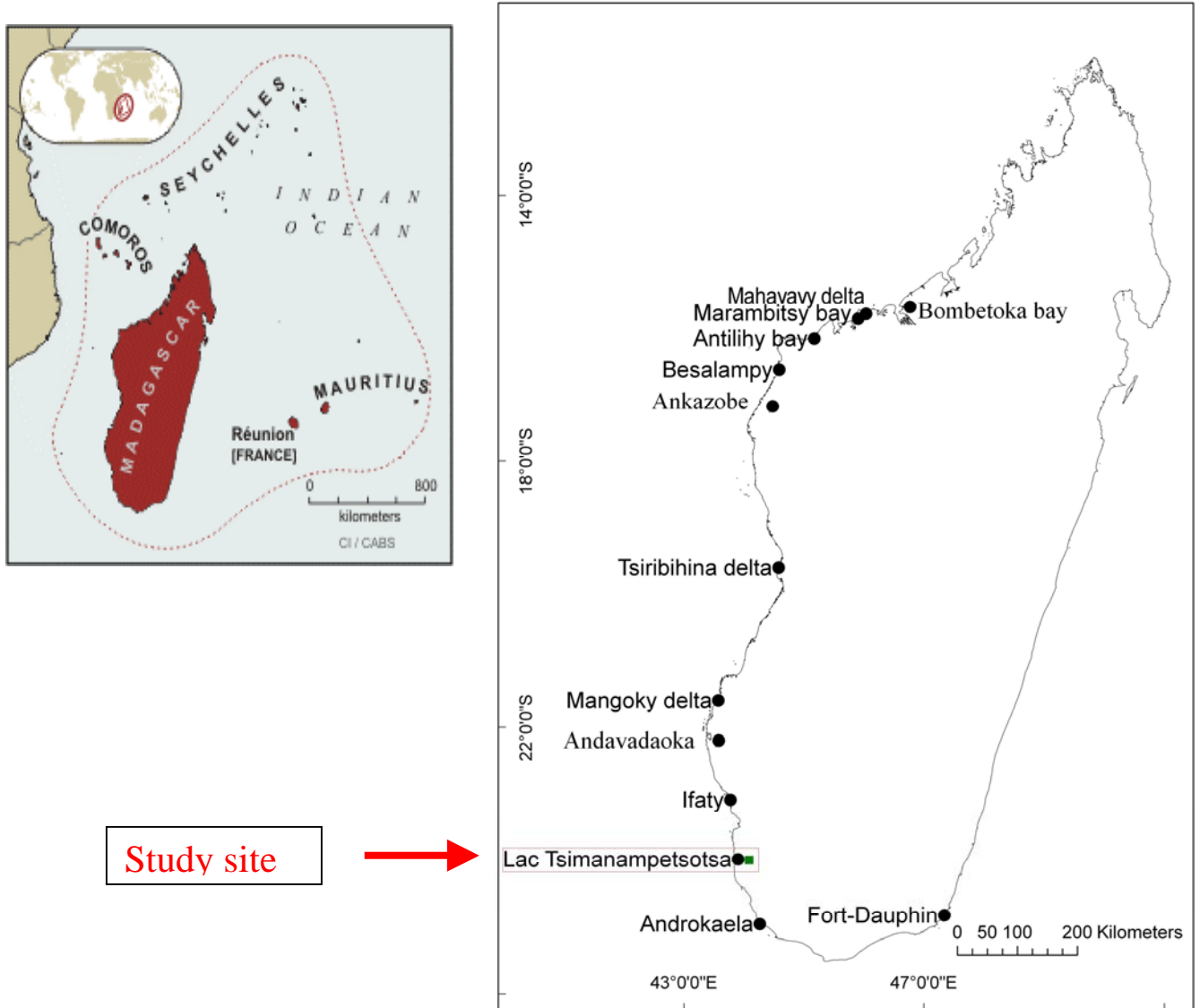
I address my acknowledgement for the following people and organisations for their helps in realising this awareness project:

- Dr Stephan Tyler and John Caddick from the African Bird Club (ABC), they funded this awareness project.
- Dr Roger Safford from BirdLife International, who supported my funding application to get this awareness project from the ABC.
- Dr Tamas Szekely, from the University of Bath, who commented and supported also my application.
- Dr Dominic Burton, from the British Ecological Society, who funded my research on plovers at Tsimanampesotse National Park.
- Dr Mark Fenn and Mrs Domoina Rakotomalala from ANGAP and WWF Toliary, they co-funded this awareness program.
- Local ANGAP teams at Efoetse village who helped me to approach local people.
- Managers of visited hotels and travel agencies in Toliara and Ambola, who accepted to share to the tourist visitors the message from the posters and brochures.
- Local authorities (Head of quarter/village), who facilitated the meeting to the local people.

## **Literatures**

- BirdLife International 2004. Threatened birds of the world. Wellbook Court, Girton Road, Cambridge, UK
- Gueye B., Freudenberger K.S. 1991. Introduction à la méthode accélérée de recherche participative (MARP). Document disponible au Birdlife International Madagascar Programme Antananarivo Madagascar.

\* **Figure 1: Study site**



**Figure 2: Poster and brochures**



African Bird Club



# Tsimanampesotse National Park, Our natural inheritance, Unique in the world

➔ The Tsimanampesotse National Park is for the people who live around the Park.

➔ The Park contributes to social and economic development programs in surrounding communities.

➔ Fauna and flora of the Park are unique in the world, let us work together to protect them:

**Flamingos**  
(*Phoenicopterus ruber*)



Not globally threatened, bred at Tsimanampesotse and migrate to Africa, sensitive in disturbance

**Granddier's Mongoose**  
(*Galidictis granddieni*)



Endangered, 5-8 cm tail long, 8 body stripes, endemic

**Madagascar plover**  
(*Charadrius thoracicus*)



Vulnerable, 32-40 g, to decline rapidly, endemic

**Radiated tortoise**  
(*Geochelonia radiata*)



Vulnerable, 30-40 cm, 15-20 kg, high survival, endemic

**Baobab tree**  
(*Adansonia rubrostipa / A. za*)



Endemic, 8-10m high, flowering November-March

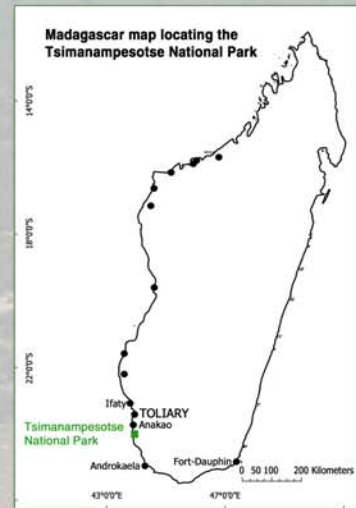
**Ring tailed lemur**  
(*Lemur catta*)



Vulnerable, female dominant, Juvenile's sexual maturity from 3 years old

**Acknowledgement:**

- The African Bird Club, UK
- ANGAP Toliary and WWF Toliary, Madagasikara
- Dr Tamas Székely, University of Bath, UK.

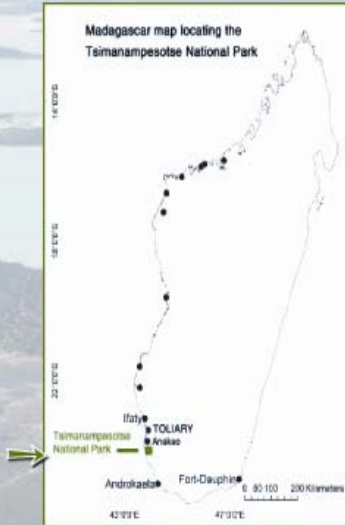


Photos: © WWF / R. Blicher, M. Fern

# Have you visited Tsimanampesotse National Park?

## Where do you find the site?

The Tsimanampesotse National Park is located in south-west of Madagascar, south of Tuleat on the road to Itampolo. The Park is managed by Parcs Nationaux Madagascar – ANGAP and their headquarters are in the village of Efoetse.

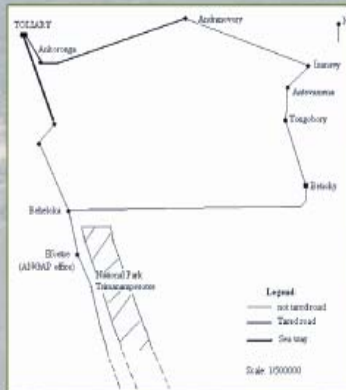


The Park includes both forest and wetland habitats. The spiny forest grows on the limestone escarpment. The wetlands habitats surround a large alkaline lake where wetland bird such as flamingos and ducks feed, with landscape of salted grassland where three species of plover live.

## How can you reach the site?

From Toliary, the two main ways to get Efoetse village are:

- 1) Road passing to Andranovory, Betsiky, Beheloka then Efoetse. Accommodations (hotel) and food can be found in Betsiky and Beheloka. You can travel by (i) car (renting or yours, 8 to 10 hours of travel) or (ii) by taxi-brousses (once per week, 15 to 20 hours of travel), which leave from Toliary each Wednesday or Thursday to go to Itampolo up to Androka. These taxi-brousses come back to Toliary each Saturday or Sunday of the same week.
- 2) Boat from Toliary to Anakao or Toliary to Soalary. Boat station can be found at the seashore of Mahavatsse quarter in Toliary where you can contact also some travel companies/agencies. During this travel, you can visit some islands at Anakao (Nosy ve and Nosy Satrana). Then you travel on sandy road using car or motorcycle or quad to get Efoetse village.



## What can you find there?

At the entrance to the Efoetse village is a park entry sign (Photo 1). Arriving at Efoetse village, you enter at the ANGAP office (Photo 2), this is where you can pay for the park entrance fees. The ANGAP have different trails systems that you can choose.



Photo 1



Photo 2

At the entrance to the Park, you can observe a variety of habitats: degraded bush forest (Photo 3), large salted area (Photo 4), an alkaline lake (Photo 5), and a typical spiny forest of south (Photo 6).



Photo 3



Photo 4



Photo 5



Photo 6



# Have you visited Tsimanampesotse National Park?

## Biological value 1 of site

If your interest is in **caves**, you can visit the cave of Mitoho where you can see blindfish *Typhleotris madagascariensis* (Photo 7).



Photo 7 - Restricted range = Tsimanampesotse. Endemic, in cave underground. Threatened, around 4-5 cm long.

If your interest is in **mammals**, you can see the carnivorous Grandier's Mongoose *Galdictis grandieri* in the evenings (Photo 8).



Photo 8 - Restricted range = Tsimanampesotse. Endangered, 5-8 cm tall long, 8 longitudinal body stripes.

If your interest is in **lemurs**, you can easily view the ring tailed lemur *Lemur catta* in the early morning hours (Photo 9).



Photo 9 - Early sexual maturity of juvenile (3 years old). Vulnerable, female dominant. Typical south west lemur of Madagascar.

## Biological value 2 of site

If you interest on **bird**, we propose you to look Madagascar plovers and flamingos.

There are three permanent species of plovers on the site: Madagascar plover *Charadrius thoracicus* (Photo 10), Kittlitz's plover *Charadrius pecuarius*, and White-fronted plover *Charadrius marginatus*. They live in a landscape of salted grasslands.



Photo 10 - Their best breeding site is Tsimanampesotse. Vulnerable, recently predicted to decline. Adult body mass = 32 to 40 g.

There are two species of flamingos, the greater *Phoenicopterus ruber* (Photo 11), and the lesser *Phoenicopterus minor*. They live on the lake and breed and nest on the lake's larger island.



Photo 11 - Lesser flamingo is threatened when Greater is not. Greater flamingo adults and juveniles (dark). Both flamingos are migrant and sensitive in disturbance.

## Biological value 3 of site

If you are interested in **plants**, you will see many interesting spiny plants and large baobabs trees (Photo 12).



Photo 12 - Flowering November-March. 2 of 6 endemic species are found at Tsimanampesotse.

If your interest is in **reptiles**, there are two species, of terrestrial tortoises; the big one is the radiated tortoise, *Geochelonia radiata* (Photo 13) and the smaller is spider tortoise *Pyxis arachnoides*. They live in forest (at Mitoho for example).



Photo 13 - Vulnerable, 30-40 cm long and 15-20 kg. Radiated tortoise, taboo locally. High survival, an adult may reach 188 years old.

## Conclusion:

The biodiversity of the Tsimanampesotse National Park is unique in the world. The Park is our natural heritage and your visit will support the ANGAP to maintain this biodiversity for future generations and to improve the socio-economic livelihoods of surrounding communities.

© Photos: S. Rafasimanana, E. Ramanantsoa, M. Fern