



Eric Gilli

The Ankarana Plateau in Madagascar

Tsingy, Caves, Volcanoes and Sapphires

Cave and Karst Systems of the World

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*To Jean Radofilao, intrepid and tireless explorer
of the Ankarana caves*

Preface

I discovered the existence of the Ankarana in 1981 when I was a geology student at Nice University attending the lessons of Prof. Julian, a famous French karstologist, along with three comrades who were also cavers. One day he showed us a map from a book based on work that had been carried out in the north of Madagascar: *The Ankarana Plateau* by Georges Rossi (1980). At first glance we were fascinated by the landscape represented on the map. Reading the book, an important part of which was devoted to the karst areas of Red Island (Madagascar), was the incentive we needed for us to put on our cavers' boots and explore such a remote area.

We had tough negotiations with Air France to obtain discounts on airline tickets compatible with our meagre resources as students. The Vieux Campeur, a famous French outdoor gear supplier, also helped us by providing cave and camping equipment. A few months later we landed in Madagascar to explore the Kelifely Plateau, an unknown area in the centre of Madagascar.

However, the Malagasy authorities told us the area was full of bandits and, anxious to avoid problems (especially since Madagascar had only recently been opened to tourism), forbade us access to the massif. They invited us instead to go to the Ankarana Plateau, located in the north of Madagascar. Although disappointed we had little option but to follow this requirement.

The French Embassy greatly helped us by providing a Land Rover (Fig. 1), a four-wheel-drive vehicle. A few days later we reached Diego Suarez (Antsiranana) along a rutted track, interspersed with rivers that were only passable by boat. Access to the Ankarana would therefore be a real adventure.

This was my first visit to the Ankarana and, despite the disappointment of not being able to reach the Kelifely, I did not regret it at all. According to bibliographic descriptions we imagined an area already well known, instead we discovered a gigantic but still wild massif, bordered by a deep forest inhabited by lemurs. Much exploration work was clearly still needed. On the first day of our expedition, a few minutes from the camp (Fig. 2), we came across Analamisondrotra, a two-kilometer-long cave. This first trip was also an opportunity to meet Jean Radofila (alias J. Duflos), who has been patiently exploring caves in the Ankarana, mostly alone, since the 1960s and who shared with us his underground adventures. Long navigations through the caves revealed cave crocodiles, giant galleries and walls covered with helictites, all of which left unforgettable memories.

The twists and turns of life allowed me to return to the Ankarana in 2005, when the 1980's student had become an academic karst specialist. Intrigued by the relationship between volcanism and karstification and perhaps somewhat drawn by the nostalgia of the past, I decided to briefly return to the Ankarana with three former Ankarana explorers: Jean-Christophe Peyre, Daniel Bessaguet and Franck Tessier. This was the beginning of a new



Fig. 1 First trip to the Ankarana in 1981



Fig. 2 The camp close to Analamisondrotra Cave in 1981

series of explorations in the southern part of the plateau. This book presents the main findings of such explorations by both our predecessors and ourselves. It highlights the immensity of the work that remains to be done and we hope that it will serve as a basis for new research.

Nice, France

Eric Gilli

Acknowledgements

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I also had the local assistance of Jean-Christophe Peyre (Ibis Madagascar), Thierry Dalais (Miavana Hotel in Madagascar) and the technical help of Gabriel Monge (Ecole des Mines de Sophia Antipolis).

I would like to express my sincere gratitude to them all.

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About the Author

Eric Gilli is a French karstologist. He was born in 1957 and studied geology and physical geography in Nice, Paris and Aix-Marseille. Formerly a consultant in Nice, he has been since 2001 a professor at the Geography Department at the University of Paris 8. His main topics are hydrogeology, karst, caves, groundwater, palaeo-environments, earthquakes, tsunamis and natural disasters. He has also been involved in shipwreck explorations and troglodyte studies. His international studies have taken him to many parts of Europe, Morocco, Tunisia, India, Madagascar, Belize, Guatemala, Haiti, USA, Iceland, Seychelles, Guyane, Brazil, Costa Rica, Papua New Guinea, China, Egypt and a few other countries.

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Abbreviations

| | |
|------|---|
| ASUM | Association Sportive de l’Université de Madagascar |
| BRGM | Bureau des recherches géologiques et minières |
| CAF | Club Alpin Français |
| FTM | Foiben-Taosarintanin’i Madagasikara (Institut géographique de Madagascar) |

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