

Project number: 5

Project applicant: Zoologische Staatssammlung München

Project Name: Biodiversity inventory and conservation priorities of the limestone formation of the Montagne des Francais region in northern Madagascar

Funds provisionally allocated: €14,600

Summary

By far most of Madagascar's species diversity is concentrated in the areas with remaining primary vegetation which cover less than 10% of the island's surface. Some of these areas harbour a remarkable number of potential local endemics and are therefore of crucial importance for the survival of many species. Unfortunately, several of these areas are still unprotected, poorly studied and under heavy pressure by local people. This is also true for Madagascar's northernmost limestone formation which includes the Montagne des Francais and several smaller, isolated areas of the same geological formation (e. g. Windsor Castle and the island Nosy Hara), however it is also threatened by illegal deforestation.

Our ongoing studies revealed almost 50 species of reptiles and amphibians at Montagne des Francais, including many threatened species which are listed on the CITES appendices. Furthermore we discovered many new species of reptiles, including geckos, snakes, at least one skink, and one dwarf chameleon. All these new species are hitherto exclusively known from Montagne des Francais, suggesting that they might be local endemics and considered as seriously threatened once a Global Reptile Assessment will have been accomplished.

Among the plants local endemics are known as well, including euphorbias and at least one orchid species. Other species are regional endemics which occur at Montagne des Francais and in associated limestone formations or have very small ranges in northern Madagascar. These species include several succulents (*Pachypodium*, *Aloe* and *Euphorbia*) and even one species of Baobab trees (*Adansonia*). The obvious species richness and the high level of local endemism are still poorly known and have been rarely documented, and for these reasons the region is still not yet included in Madagascar's net work of protected areas (although it has the status as "classified forest"). The legal protection of the area(s) is therefore crucial for the long-term survival of many locally or regionally endemic species.

The aim of the proposed project is to provide the scientific data which are necessary to justify the legal protection of these areas (either as Reserve Special or National Park) by publishing species inventories of selected groups of animals and plants in Montagne des Francais and associated unprotected limestone formations of the north. Furthermore, conservation priorities for the surveyed areas and their (presumed) threatened local or regional endemics will be proposed.

The field studies will be carried out in cooperation with the Département de Biologie Animale, Université d'Antananarivo, for a period of about six weeks in the rainy season between January and March 2008 by international scientists, Madagascan biology students, and local guides. Surveys will include vertebrates (freshwater fishes, amphibians, reptiles, selected mammals), selected groups of insects (e. g. Mantodea, Phasmatodea, selected Coleoptera and Lepidoptera), invertebrates (e. g. crabs, scorpions, myriapods), and plants (e. g. succulents). The results of the surveys including the recommendations of conservation priorities will be documented by scientific publications which can be considered as short term success of the project. The long term success of the project would be that Montagne des Francais and (pending on the survey results) additional areas in the region would receive the legal status as nature reserves (e. g. Reserve Speciale or Parc National). This long term success might largely depend on the political situation in Madagascar, especially on the Madagascan government. However, since Madagascar's current president, Marc Ravalomanana, has declared his intention to greatly enlarge the current network of nature reserves, we consider the chances of a long term success of the project as very high.