Chapter 6

Rapid survey of amphibians and reptiles in the Boké region, northwestern Guinea

Annika Hillers, Mohamed Alhassane Bangoura, Néma Soua Loua and Mark-Oliver Rödel

SUMMARY

During the herpetological survey of three districts in the Boké region, we recorded at least 26 amphibian and 11 reptile species. Most of the recorded species were connected to savanna or farmbush habitats and have a distribution area that exceeds the Upper Guinean forest block or even West Africa. Only a few species were typical forest specialists. For several species our records are large range extensions. Others need further examination to determine their taxonomic status; one species might be new to science. Four of the detected reptile species are threatened and listed under CITES.

As there was no rain during the entire RAP period, the weather conditions were not favourable for the investigations of the herpetological fauna. Further research is needed to comment on the Boké region's comprehensive herpetological diversity. Due to the availability of many different habitat types, there might exist a surprisingly high diversity for lower Guinea, given the high degree of degradation in some parts of the Boké region. The regional herpetofauna faces different threats, especially the destruction of suitable habitats.

INTRODUCTION

While the forested areas of Guinea, especially in the south eastern part of the country, have been the target of several herpetological surveys (e.g. Guibé and Lamotte 1958a, 1958b, 1963; Schiøtz 1967, 1968; Böhme 1994a, 1994b; Rödel and Bangoura 2004; Rödel et al. 2004; Greenbaum and Carr 2005) the knowledge of the herpetofauna in lower Guinea and in the north of the country is still scarce. The fact that the Guinean forest habitats are among the most diverse African regions in respect to amphibians (Rödel and Bangoura 2004; Rödel et al. 2004) may be a hint that also the savanna and farmbush habitats provide or provided suitable habitats for a great number of species depending on the particular degree of habitat degradation. This could also be true for the Boké region. Facing different threats like habitat destruction and alteration as well as increasing bauxite mining activity in this area, the knowledge of present amphibian and reptile species is urgently needed. These organisms are extremely sensitive to habitat changes, thus they are significant bio-indicators. The composition of amphibian assemblages might therefore reflect the degree of habitat degradation and destruction (compare Rödel and Branch 2002; Rödel and Ernst 2003) eventually caused by the mining activities or certain agricultural practices.

During our investigations we concentrated on amphibians, as there are standardized methods to investigate these organisms, while reptile records were gathered by chance. In general the dry weather conditions at the end of the dry season were not favourable for the investigations of the herpetofauna. There was no rain during the entire RAP period and we are sure to be far from having a representative picture of the amphibians' and especially reptiles' biodiversity at the different sites in the Boké region. Nevertheless, we are able to provide some useful conservation recommendations.

131