

# Amphibians and Reptiles of Nyungwe National Park: A preliminary report

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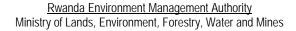












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# Amphibians and Reptiles of Nyungwe National Park A preliminary report

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#### Introduction

The present draft represents a preliminary report of a survey conducted in November 2008 aimed to produce an inventory of the herptofauna of Nyungwe Forest National Park. The specimens collected were not yet properly examined and most identifications were just carried out in the field with no specific literature or comparison material. Nyungwe National Park comprises the largest single block of montane rainforest in East Africa. It covers more than 1000 square km of mountainous, rugged terrain, spanning an altitudinal range from 1700 to 2950 m asl (Bigugu peak). Nyungwe is part of the Albertine Rift centre of Endemism and the Eastern Afromontane Global Biodiversity Hotspot.

### Study sites

Table 1.

Sampling site	UTM co-ordinates	Elevation range m asl	Main vegetation Type	Main habitats investigated
Site 1 'Kamiranzovu'	35 M 0740054 9725934	1980	Montane forest and high wetland	Open canopy forest, wetland
Site 2 'Karamba' Site 3	35 M 0734750 9725824 35 M 0748046		Montane forest and secondary vegetation Montane forest and	Open canopy forest and wetland, Open canopy forest
Busoro Stream	9715992		secondary vegetation	along stream
Site 3 Uwinka	35 M 0744614 9725928	2426	Montane forest with synantropic habitats	Synantropic habitats and touristic trails

#### **Material and Methods**

The sites have been sampled by opportunistic search; visual and acoustical monitoring of the habitat during the day and night, for 6, 2, 5 days respectively, Searches were conducted both during the day and by night to sample the highest number of species. Individual abundances have been recorded. The site around Uwinka Ranger Post was samples just opportunistically for a couple of days. Specimens have also been sampled opportunistically during forest walks in two touristic trail, (waterfall trail at Gisakura and Red Trail at Uwinka).

Voucher specimens have been collected and, when possible, frog calls were recorded by means of a Sony TCM directional microphone and a Sony Minidisc. For most specimens the identification must be considered just preliminary, therefore after the final species identification,  $\alpha$  and  $\beta$  diversity as well as species composition could be different from the table 2 herein presented.

## Results

During 13 days of survey 27 species have been recorded, of these 12 are Amphibians and 15 are Reptiles. Specimens were not properly examined therefore species identifications are just preliminary.

Table 2. Preliminary check List of Amphibians and Reptiles of Nyungwe National Park

Таха	Site 1 Kamizanzovu	Site 2 Karamba	Site 3 Busoro
AMPHIBIANS			
Arthroleptidae			
Arthroleptis adolfifriderici	Uwinka		
Leptopelis cf. kivuensis	+	-	-
Leptopelis sp.	-	+	+
Bufonidae			
Bufo cf. gutturalis	Uwinka		
Bufo kisoloensis	-	-	+
Hyperolidae			
Afrixalus laevis	+	+	-
Hyperolius castaneus	+	+	+
Hyperolius frontalis	-	-	+
Hyperolius sp. 1	+	+	-
Hyperolius sp. 2	+	+	-
Pyxicephalidae			
Amietia cf. fuscigula	+	-	-
Pipidae			
Xenopus wittei	+	+	+
REPTILES			
Chamaeleonidae			
Chamaeleo adolfifriderici	Uwinka		
Chamaeleo johnstonii	+	+	+
Rhampholeon boulengeri	+	+	+
Lacertidae			
Adolfus vaueresellii	+	-	-
Adolfus jacksoni	Gisakura		
Typhlopidae			
Typhlops sp.	-	-	+
Lamprophidae			
Lamphrophis fuliginosus	-	-	+
Colubridae			
Buhoma depressiceps	-	-	+
Philothamnus ruandae	-	-	+
Philothamnus heterodermus	Waterfall trail		
Lamprophis olivaceus	-	-	+
Dasypeltis atra	-	-	+
Duberria lutrix	-	+	-
Dipsadoboa unicolor	-	-	+
<b>Viperidae</b>			
Atheris nitschei	+	+	+

#### **Discussion**

The survey conducted is preliminary and the results obtained so far, do not allow any conclusion on species richness and composition as well as ecological and biogeographic peculiarities of the herpetological fauna of Nyungwe National Park.

#### **REFERENCES**

Channing, A. & K. M. Howell. (2006). Amphibians of East Africa. Chimaira/Cornell University Press, 432 pp.

Drewes, R. C. and J. V. Vindum. 1991. Amphibians of the Impenetrable Forest, southwest Uganda. Journal of African Zoology 108(1): 55-70.

Hinkel, H. & Fisher, E. 1988 Reptiles et Amphibiens du Rwanda et leurs environnement, Naturwissenschafttliche Forschungsgruppe Zentral & Ost Afrika, Johannes Gutemberg Universitat, Mainz

Schiøtz, A. 1999. Treefrogs of Africa. Edition Chimaira, Frankfurt am Mein, Germany.

Spawls, S., Howell, K., Drewes, R. & Ashe, J. 2002. A field guide to the Reptiles of East Africa. Academic Press, San Diego, California.