



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

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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.

<i>Sampling site</i>	<i>UTM co-ordinates</i>	<i>Elevation range m asl</i>	<i>Main vegetation Type</i>	<i>Main habitats investigated</i>
Site 1 'Kamiranzovu'	35 M 0740054 9725934	1980	Montane forest and high wetland	Open canopy forest, wetland
Site 2 'Karamba'	35 M 0734750 9725824	1940	Montane forest and secondary vegetation	Open canopy forest and wetland,
Site 3 Busoro Stream	35 M 0748046 9715992	1810	Montane forest and secondary vegetation	Open canopy forest 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

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

## **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.

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