

THE HERPETOFAUNA OF THE EASTERN SIDE OF THE LAKE TURKANA (NORTHERN KENYA)

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The region located in the eastern side of the Lake Turkana is one the least known from the herpetological point of view, in East Africa (cf. Spawls et al. 2001). Here are presented the results of 10 herpetological surveys carried out between 2001 and 2005 by the Pavia University (Italy) and the Brno university (Czech Republic), in collaboration with the National Museum of Nairobi (Kenya).

The study area is the region located in the eastern side of the Lake Turkana and its islets, eastwards to the village of North Horr, northwards to the border with Ethiopia and southwards to the Mt. Kulal. The area is characterised by extremely arid lowland habitats (from semidesert to arid savannah), except of the summit area of Mt. Kulal, covered by afro-montane forest remnants and mesophilous vegetation formations. The research has been carried out by means of direct observations, both diurnal and nocturnal.

A total of 7 species of Amphibians and 49 of Reptiles (1 crocodile, 4 turtles, 23 lizards, and 21 snakes) listed in Table 1 have been found, many of which were not recorded for the area by Spawls et al. (2001) and other authors; it is remarkable that 16 (28.5 %) species, highlighted in bold in the table, have been observed exclusively on Mt. Kulal, which turns out to be very likely a relict range.

The herpetological community of the area is made of some groups of species clearly differentiated from the ecological and biogeographical point of view: **a)** species characteristic of more mesic habitats, with more or less wide distribution in East Africa, with isolated populations in Mt. Kulal or by some oases, due to the increasing desertification occurred at lower altitudes; **b)** species well adapted to arid habitats (widely distributed or mainly present in the Somali region), which reach in the area of Lake Turkana their range limit; **c)** species with Palaearctic range well adapted to arid habitats that have their southern distribution limit in the study area; **d)** endemic species: *Chamaeleo narrayioca*, recently described for the forest of Mt. Kulal (Necas et al., 2003), and *Pelusios broadleyi*, known so far only in a small water source, whose remains have been found in the lake side, as well as a Colubrid snake and a *Hemidactylus* gecko, whose description is ongoing at present; **e)** aquatic species living in the Lake Turkana or in permanent pools along *laggas* (temporary streams).

Tab. 1. Amphibians and Reptiles of the eastern side of the Lake Turkana on the base of original collections and observations of the authors (in bold the species only collected on Mt. Kulal).

species	family		species	family	
1 <i>Bufo lughensis</i>	Bufoidea	b	29 <i>Echis pyramidum</i>	Viperidae	c
2 <i>Bufo turkanae</i>	Bufoidea	b	30 <i>Agama agama lionotus</i>	Agamidae	a
3 <i>Bufo cf. gutturalis</i>	Bufoidea	a	31 <i>Agama rueppelli</i>	Agamidae	b
4 <i>Ptychadena anchietae</i>	Ranidae	b	32 <i>Chamaeleo bitaeniatus</i>	Chamaeleonidae	a
5 <i>Ptychadena mascareniensis</i>	Ranidae	b	33 <i>Chamaeleo narrayioca</i>	Chamaeleonidae	d
6 <i>Ptychadena cf. taenioelalis</i>	Ranidae	b	34 <i>Hemidactylus brooki</i>	Gekkonidae	b
7 <i>Tomopterna cryptotis</i>	Ranidae	b	35 <i>Hemidactylus isolepis</i>	Gekkonidae	b
8 <i>Crocodilus niloticus</i>	Crocodylidae	e	36 <i>Hemidactylus macropholis</i>	Gekkonidae	b
9 <i>Eryx colubrinus</i>	Boidae	b	37 <i>Hemidactylus n. sp.</i>	Gekkonidae	d
10 <i>Colubridae n.gen. n.sp.</i>	Colubridae	d	38 <i>Hemidactylus platycephalus</i>	Gekkonidae	b
11 <i>Crotaphopeltis hotamboeia</i>	Colubridae	a	39 <i>Hemidactylus ruspolii</i>	Gekkonidae	b
12 <i>Dasypeltis scabra</i>	Colubridae	a	40 <i>Lygodactylus kenyanensis</i>	Gekkonidae	a
13 <i>Dispholidus typus</i>	Colubridae	a	41 <i>Lygodactylus cf. somalicus</i>	Gekkonidae	a
14 <i>Lamprophis fuliginosus</i>	Colubridae	a	42 <i>Stenodactylus sthenodactylus</i>	Gekkonidae	c
15 <i>Lycophidion sp.</i>	Colubridae	a	43 <i>Gerrhosaurus flavigularis</i>	Gerrhosauridae	a
16 <i>Philothamus semivariatus</i>	Colubridae	a	44 <i>Latastia longicaudata</i>	Lacertidae	a
17 <i>Platyceps brevis smithi</i>	Colubridae	b	45 <i>Pseuderemias smithi</i>	Lacertidae	b
18 <i>Platyceps florulentus florulentus</i>	Colubridae	b	46 <i>Afroablepharus sp.</i>	Scincidae	a
19 <i>Psammophis cf. punctulatus</i>	Colubridae	b	47 <i>Chalcides ocellatus bottegi</i>	Scincidae	c
20 <i>Psammophis biseriatus</i>	Colubridae	b	48 <i>Lygosoma afrum</i>	Scincidae	a
21 <i>Psammophis semivariatus</i>	Colubridae	b	49 <i>Lygosoma sundevalli</i>	Scincidae	b
22 <i>Rhamphiophis rubropunctatus</i>	Colubridae	b	50 <i>Mabuya quinquetaeniata</i>	Scincidae	b
23 <i>Telescopus dhara</i>	Colubridae	b	51 <i>Mabuya striata</i>	Scincidae	a
24 <i>Apparalactus lunulatus</i>	Elapidae	a	52 <i>Mabuya varia</i>	Scincidae	a
25 <i>Naja haie</i>	Elapidae	a	53 <i>Pelomedusa subrufa</i>	Pelomedusidae	e
26 <i>Naja pallida</i>	Elapidae	a	54 <i>Pelusios broadley</i>	Pelomedusidae	e/d
27 <i>Leptotyphlops machrorhynchus</i>	Leptotyphlopidae	c	55 <i>Malacochersus tornieri</i>	Testudinidae	a
28 <i>Bitis arietans</i>	Viperidae	b	56 <i>Trionyx triunguis</i>	Trionychidae	e

Key words. Kenya, East Africa, Lake Turkana, herpetofauna, Amphibians, Reptiles.