Snakes In Malawi

Snake Collecting and Data Recording Experiences January 1960 – January 1968 & 1999

By Andy Martin - 8th July 2024

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Beautiful Baobab © Andre Looijestijn



Shire River © Omar Hakeem



Lake Malawi © Craig Manners



Liwonde © Craig Manners

It was a privilege to grow up in Malawi from early 1956 until the end of December 1967, a profoundly exciting and formative time in my life, when I lived with my family in Limbe near Blantyre in the Shire Highlands of southern Malawi at 1210m above sea level (ASL). While recently revisiting many years of records in folders and notebooks from various parts of the world, I decided that listing and publishing these records for the two periods spent collecting and recording in Malawi with a few experiences, may prove useful to the herpetological community and in particular those interested in this magical part of Africa. This record lists 38 species from 744 live specimens collected during almost eight years. This article is a historical record of Malawi snake species, as Rupert Wilkey author of **Snakes of Malawi - A field guide to the snake species of Malawi** has said, "snakes species recorded in this article, may no longer exist in some locations due to human encroachment and the dramatic change in habitat during the last 50 years".

Malawi is a landlocked country in southeastern Africa, approximately 837 km long and 8 - 160 km wide, bordered by Tanzania to the north and east, Mozambique to the east, south and west and Zambia to the west (Figure 1). Malawi's landscape has some 24 different habitat types, situated at the southern end of the Great Rift Valley, which sweeps down the country from north to south and includes Lake Malawi and the Shire River Valley (Page 1 photos & Figure 1). The shore or littoral zone along the western and southern lake shores, ranges from 8 to 24 km in width, covering about ten per cent of the total land area and is littered with lagoons and swamps. The Shire River valley stretches approximately 400 km from the southern end of Lake Malawi at Mangochi at 457m ASL, to Nsanje at 90m ASL on the Mozambique border in the south, just before the Shire flows into the Zambezi. The central Malawi plateaus lie just west of Lake Malawi and are between 760m and 1,370m ASL and these plateaus cover about three-quarters of the total land area. The highlands rise to 2,600m ASL and include the Nyika (National Park) and Viphya plateaus in the north, the Dowa highlands and the Dedza-Kirk mountain range in the central province and the Shire Highlands in the south. Zomba which reaches 2,087m is the high point of the Shire Highlands that descend rapidly in the east to the Lake Chilwa-Phalombe plain across which, rises the isolated majesty of Mulanje that, at 3,002m ASL, stands out from the Phalombe plain and is the highest point in the country. (Figure 10)

Malawi's diverse climate, elevation and soils are reflected in the wide variety of habitats, savanna in the drier lowland areas, *miombo or brachystegia* woodlands and sparse, open deciduous woodland, Flourishing acacia woodlands in isolated, more fertile plateau locations and along the margins of rivers and streams. *Dambo's* or grass-covered depressions litter the plateaus whilst savanna with rocky outcrops

(kopje's) and evergreen montane forests are found in the highlands along watercourses and on the Mulanje and Zomba massifs.

This beautiful landscape is home to sixty-five known species of snake, sixty-nine species of lizard, nine chelonians, one crocodilian, two caecilians and seventy-seven species of frog with more likely undiscovered. The occurrence of three additional snake species in Malawi is questionable without further detailed scientific investigation.

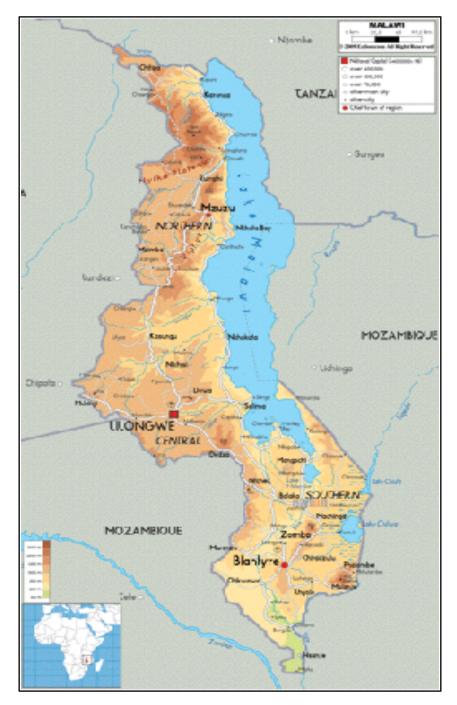


Figure 1: Malawi showing major geographical features such as elevations, mountain ranges, savannahs, lakes and other topographic details. Ezilon

<u>Maps</u>

By age 10 (1960), I was already deeply fascinated by the variety of birds, myriad variety of insects and butterflies and especially, the lightning-fast striped skinks and plated lizards, wonderful blue-headed agamids on the Jacaranda trees and beautiful chameleons. Then, that year, I caught my first snake which, turned out to be a Herald Snake (*Crotaphopeltis hotamboeia*), I picked it up without restraining it and although agitated, it did not attempt to bite, so I decided to take it home and show my Mum....well she leapt straight up on a chair yelling like a banshee and Albion our employee went an ashen colour and ran outside to announce my madness which, caused quite a stir in our Limbe neighbourhood! The little snake struck out defensively, with mouth open at anyone who came near me but still made no attempt to bite me. I released the snake where I found it and was admonished, but it was too late, the fire of passion for herpetology was lit and has been ever-present throughout my life.

Bird watching and collecting butterflies dovetailed nicely with looking for diurnal snake species and learning to identify birds by their calls, I was led on many occasions to capture a snake I would have otherwise missed. There were three seasons, each approximately four months long, a cool dry season from about May to August, a hot dry season from September to mid-December and a hot wet season from mid-December to April. The most prolific time for collecting was December to April, during the rainy season.



Figure 2: 1962 with Meller's Chameleon (Trioceros melleri) nice haircut too! The jersey I wore was bright yellow and black with shades of brown and this beautiful Chameleon matched it perfectly.

In 1962, my parents bought me **Snakes of Nyasaland** a brilliant new book by Charles Sweeney, which I absorbed like a sponge in just a few weeks. My parents realised that I would not stop collecting snakes and ought to know as much as possible about them, then in early 1964 **Snakes of Southern Africa** by FitzSimons arrived. I still have these two excellent books today, they gave me a solid grounding in snake

identification and habitats and from this I developed a system for recording scales and other morphometric parameters that I modified with experience and have continued to use ever since. I also developed techniques for incubating and hatching eggs from many reptile species, including chameleons, lizards and snakes, when found exposed or laid in captivity. One of the most exciting occurrences was hatching three out of four eggs from the Zomba Pigmy Chameleon (*Reippeleon brachyurus*). I found a female (56mm long) and a male (45mm long) at the ITG (Burn) Dam in Limbe and after a short while in my care, the female laid four eggs. I released the adults back where I found them and incubated the eggs. After 74 days to my surprise and delight, three miniature pigmy chameleons emerged, each one approximately 10-12mm long and after two days, I released them in the same area that I found the parents, where they became almost instantly invisible. These techniques have also served well over the years for captive breeding programmes.

Malawians are generally petrified of snakes and either run or kill them on sight, they are taught that all snakes are dangerous to avoid being bitten by one of the potentially lethal species that occur there. As my reputation for collecting snakes spread locally, I realised I needed a system. Someone would arrive to announce that they had seen a snake in their village and by the time I had run or cycled there, the snake had moved on! So I came up with an incentive scheme. On finding a snake, one person would stay and watch it and one would come and get me. If I caught the snake, I would pay three pence per foot with a sixpence bonus if it was a heavy-bodied species, for example, a Puff Adder! I had to wash a lot of cars, and windows and do odd jobs to augment my pocket money, but the system worked well as at that time, 10 feet (3m) of snake (Two shillings & Six pence) would pay for a 52kg sack of Maize flower, which would last a local family for a month. On one call out, I cycled 27km down 460m of elevation and my reward was one *Naja annulifera* - *S*nouted Cobra, one *Bitis arietans* - Puff Adder and one *Psammophis subtaeniatus* - *S*tripe-Bellied Sand Snake.

News spreads quickly in Africa and by 1965, one unafraid Malawian Desmond Nudi started bringing me snakes from the southern and central Lake Malawi area every three months or so. I recorded road kills, where they were not too badly damaged for accurate scale counts, these additional numerical records are not included in the tables that appear later in this article.

In a large brick-built shed next to the garage, I kept various species for short periods to observe and understand behaviour, feeding and potential breeding. These included *Bitis arietans, Boaedon capensis, Causus rhombeatus, Causus defilippii, Crotaphopeltis hotamboeia, Dispholedus typus viridis, Psammophis family, Python natalensis* and *Thelotornis capensis*, to name a few.

I was often bitten by harmless or back-fanged snakes such as *Boaedon capensis*, *Crotaphopeltis hotamboeia* and members of the *Psammophis family* during early-stage free handling.

In September 1965, John Handman, a friend and local butterfly authority, arrived with a battered-looking brown suitcase, which he suggested I open outside but was guarded about its contents! Coiled up in the case was a beautifully marked *Python natalensis* (Figure 3/3a) just over 2.4m long and a male. This snake initially struck with a wide open mouth, but soon calmed down. It was a quirky individual, as it would allow me to handle it and carry it on my shoulders, but lunged out violently with mouth agape at anyone that came near, a bit disconcerting the first time it happened! I kept this Python for 2 years, releasing it where it came from on the Shire River. When released, it measured 3.2m and had almost doubled its weight.



Figure 3: Python natalensis © Bernhard Schuster



Figure 3a: Python natalensis © Bernhard Schuster

In 1965 I sustained a bite from *Causus defilippii*, (Figure 4) a normally docile specimen, while removing it from its vivarium. Normally, I would have just lifted it out but as someone was present, I restrained it behind the head and it turned against the glass and punctured my thumb with both fangs. I experienced mild swelling, slightly swollen glands under the arms and mild discomfort for several days.



Figure 4: Causus defilippii © Bernhard Schuster

Figure 5: Thelotornis capensis © Bernhard Schuster

In 1966, I received an accidental bite from *Thelotornis capensis* (Figure 5) during feeding, where instead of taking a chameleon, the snake attached itself to the middle joint of my little finger on my left hand (my fault entirely). It punctured the fleshy underpart with both fangs, but released quite quickly and then proceeded to grasp, envenom and consume the chameleon. Surprised but not panicked, I washed my hands and waited to see what might happen. I was aware that the venom would be haemotoxic and sure enough, overnight, there was some evidence of subcutaneous bleeding, swelling in my hand and discomfort in my finger and heel of my hand, with a slight temperature. My hand and finger remained slightly swollen and tender for about 5 days.

Still on envenomation, in my absence, my Dad was asked to investigate a dead snake at Limbe Club, which he suspected was *Atractaspis bibroni*. After separating the parts of its smashed head, he found the fangs and confirmed to the Club that it was indeed *Atractaspis bibroni*, a Stiletto Snake, which was venomous. The following day he felt unwell, with a temperature and very sore elbow and underarm glands. He had bursitis on his left elbow, which he had been scratching, forgetting that he had been handling the Stiletto Snake's mashed head! The effects lasted several days and the bursitis sloughed off over the next few weeks.

I would usually restrain snakes using a five-foot straight peach pole which doubled as my butterfly net pole however, this was not helpful with arboreal species like *Dispholidus typus viridis* - Boomslangs, Thelotornis capensis/mossambicanus - Vine Snakes or Dendroaspis polylepis - Black Mambas and there were no fancy snake grabs available back then. So I created a grab using a two-and-a-half metre round wooden pole with a bicycle calliper brake at one end with the brake blocks replaced with spongeprotected wooden strips forming the grab mechanism. An extra long cable was clipped to the pole and connected to a brake handle at the other end to operate the grab and a heavy rubber band made from a strip of car inner tube to hold the brake handle closed, once a specimen had been acquired. This worked quite well but was a bit heavy and unwieldy in thick bush and Acacia thorn trees and it protruded front and back when secured to my bicycle crossbar! So I had an idea for a collapsible version using three or four aluminium butterfly extension rods, a lightweight aluminium racing bike calliper and the corresponding brake handle. The cable ran inside the hollow rods which screwed together. When unscrewed, this broke down to a three-foot bundle and fitted into a canvas carrying guiver which, when worn across my back did not impede my progress through the bush. The second useful invention used a golf driver shaft with the head removed leaving a hollow tube through which I passed a bicycle brake cable. The cable was fixed at the base of the metal tube allowing the cable to be pushed and pulled to form a variable loop with foam rubber protection. On several occasions, I safely removed *Thelotornis* and Dispholidus from the lower branches of trees and occasionally restrained Naja without grabbing them by the tail.

Dendroaspis angusticeps - Green Mambas appear less common in Malawi than Dendroaspis polylepis - Black mambas (Figure 6) and in my experience, Black Mambas are not that common either. I frequented Limbe Club Golf Course regularly searching for snakes. Although Charles Sweeney caught a Green Mamba there I was unlucky and only encountered one on the Shire River near Chikwawa, which I could not capture in the thick riverine bush.

In eight years, I only caught eight *Dendroaspis polylepis*, the most notable being in July 1966, while on the way to Ruo Gorge, Mulanje. We stopped at the side of the road about 15 km from our destination to buy peanuts and fruit and ask about snakes. We were told they had a problem with an unwanted guest in a village house about 400 metres away. We parked the car and made our way to the village. A crowd had gathered and the occupants of a round adobe house with a grass roof were standing outside in an agitated state. They said there was a Black Mamba inside in the roof supports, I was dubious, but would have to use the grab I thought. It took a couple of minutes for my eyes to become accustomed to the smokey



Figure 6: Dendroaspis polylepis © Bernhard Schuster

gloom and sure enough, tucked up in the pitch of the roof was a large Black Mamba peering down. Using the extended grab, I managed to secure the snake about a metre from the head and gradually and as gently as I could, extricate it from the roof struts. I reversed out the door and emerged with a large Black Mamba in a grab, angrily snapping and chomping. A large crowd had gathered to see 'Azungu' get bitten, were disappointed and scattered to a suitable distance. I secured the Mamba's head, released the grab, and successfully bagged the snake to collect data later and release it at Ruo Gorge. This female snake measured 2.9 metres and was the largest Black Mamba I encountered.

The following year, I caught another 2.3-metre specimen not far from this location after it had crossed the road into a field of Maize stubble. I gave chase and eventually grabbed it by the tail, which caused it to turn on me rapidly with open mouth and advance towards me. Retreating, I gave the Mamba some space and stood still and as soon as it felt secure enough it set off at high speed. This time I secured it, took measurements and then released it away from habitation. There is so much mythology surrounding these lovely, but dangerous snakes and it was a relief to see that they are no different from any other threatened or cornered snake, they become defensive, but would rather escape as soon as the opportunity arises. *Dendroaspis polylepis* did not appear common in Malawi and were found mostly at lower elevations and I am pleased to have had some direct experience with them.

Notes on the tables:

Column: 1 Species Number, (SN)

Columns: 2 & 3 Latin Names column 2 (1960), column 3 (2024)

Column: 4 English Name, Column: 5 Location, Column: 6 Comments

Column: 7 SC = Live collected snake specimen count. (SC) (roadkill and other dead specimens, other reptiles and amphibians are not recorded in this table).

Blue Font listings in tables highlight the probability that some of my recorded specimens are a record of those species, particularly Vine Snakes.

Table I: List of Species recorded including general location and species count – *Typhlopidae*

SN	Latin Name	Latin Name	English Name	Location	Comments	SC
Typh	lopidae – Blind Snakes	3				
1	Typhlops tettensis	Afrotyphlops obtusus	Shire Burrowing Snake	Chikwawa, Mwanza		4

Table II: List of Species recorded including general location and species count – Leptotyphlopidae

SN	Latin Name	Latin Name	English Name	Location	Comments	SC	
Lepto	Leptotyphlopidae – Worm and Thread Snakes						
2	Leptotyphlops conjuncta	Leptotyphlops incognitus	Incognito Thread Snake	Chiromo, Mwabvi area		7	
3	Leptotyphlops longicauda	Myriopholis longicauda	Long-Tailed Thread Snake	Limbe/Shire Highlands		9	

Table III: List of Species recorded including general location and species count – Pythonidae

SN	Latin Name	Latin Name	English Name	Location	Comments	SC
Pythonidae – Pythons						
4	Python sebae	Python natalensis	Southern African Python	Lower River, Mulanje, Liwonde to the lake. From neonates to 4.4m	Largest specimen was from Chiromo area.	17

^{*}Southern Vine Snake – subsequently two species.

^{**}Black-Necked Spitting Cobra – subsequently two species

Table IV: List of Species recorded including general location and species count — *Colubridae* — Aglyphous

SN	Latin Name	Latin Name	English Name	Location	Comments	SC
Colul	oridae – Aglyphous – Fangless,	Harmless Snakes				
5	Dasypeltis scabra	Dasypeltis scabra	Common Egg Eating Snake	Shire Highlands, Lower River and lake Malawi		5
6	Boaedon fuliginosus	Boaedon capensis	Common House Snake	Widespread up to 1375m ASL		85
7	Natriciteres olivacea	Natriciteres olivacea	Olive Marsh Snake	Lake Malawi and Lower River		5
8	Lycophidion capense	Lycophidion capense capense	Cape Wolf Snake	Shire Highlands, Chileka and Mdima		18
9	Mehelya capensis	Limaformosa capensis	Southern File Snake	Mpingwe and Chiradzulu		4
10	Mehelya nyassae	Gracililima nyassae	Nyasa File Snake	Phalombe		4
11	Philothamnus semivariegatus	Philothamnus semivariegatus	Spotted Bush Snake	Shire Highlands to Lower River, Liwonde		11
12	Philothamnus hoplogaster	Philothamnus hoplogaster	Eastern Green Snake	As 11		19
13	Philothamnus irregularis	Philothamnus angolensis	Angolan Green Water Snake	As 11		9
14	Prosymna ambigua	Prosymna ambigua	East African Shovel- Snout	Chikwawa and Lower River		3
15	Duberria lutrix	Duberria shirana	Shire Slug Eating Snake	Zomba, Mpingwe and Soche		5

Table V: List of Species recorded including general location and species count – *Colubridae* – Opistoglyphous

SN	Latin Name	Latin Name	English Name	Location	Comments	SC
Colul	bridae – Opistoglyphous – Re	ear or back Fanged Snakes				
16	Crotaphopeltis hotamboeia	Crotaphopeltis hotamboeia	Herald Snake	Widespread up to 1375m ASL		112
17	Crotaphopeltis tornieri	Crotaphopeltis tornieri	Tornier's Cat Snake	Nyika Plateau		1
18	Telescopus semiannulatus	Telescopus semiannulatus semiannulatus	Eastern Tiger Snake	Limbe and Lower River area		5
19	Hemirhagerrhis nototaenia	Hemirhagerrhis nototaenia	Eastern Bark Snake	Lower river, Mwanza and Thyolo Tea Estates		3
20	Rhamphiophis oxyrhynchus rostratus	Rhamphiophis rostratus	Rufous Beaked Snake	Lower River to central lake Malawi		11
21	Psammophis sibilans	Psammophis mossambicus	Olive Sand Snake	Lower River to central lake Malawi		35
22	Psammophylax tritaeniatus	Psammophylax tritaeniatus	Striped Grass Snake	Chinteche area and Lower River		12
23	Psammophis subtaeniatus	Psammophis subtaeniatus	Stripe Bellied Sand Snake	Lower River, Shire Highlands and the southern and central lake		15
24	Thelotornis kirtlandii	Thelotornis capensis Thelotornis mossambicanus	*Southern Vine Snake Eastern Vine Snake	Shire Highlands, Lower River, Mulanje and up to Chinteche -	There are differences in head colour and markings in specimens from Mulanje and Mwabvi area	67
25	Dispholidus typus	Dispholidus typus viridis	Boomslang	Lower River to Mzuzu and recorded on Nyika at approx 1820m elevation in 1999	Male, Female and Juvenile colour forms	71
26	Calamelaps unicolor	Amblyodipsas polylepis polylepis	Purple Glossed Burrowing Snake	Limbe, Mpingwe, Soche, Chiradzulu and Zomba		13
27	Aparallactus capensis	Aparallactus capensis	Cape Centipede Eating Snake	Bvumbwe and Mpingwe	Some colouration differences	5

Table VI: List of Species recorded including general location and species count — *Elapidae* — Proteroglyphous

SN	Latin Name	Latin Name	English Name	Location	Comments	SC
Elapi	dae – Proteroglypho	ous – Cobras and Mamba	as – Fixed Front Fanged	Snakes		
28	Naja nigricollis	Naja nigricollis Naja mossambica	**Black Necked Spitting Cobra Mozambique spitting cobra	Lower River, Shire Highlands and around Lake Malawi	Marked differences in colour on some specimens.	57
29	Naja melanoleuca	Naja subfulva	Eastern Forest Cobra	Recorded from Mpingwe and from other montane forest areas in the Shire Highlands	2.3 metres top of Mpingwe	16
30	Dendroaspis polylepis	Dendroaspis polylepis	Black Mamba	8 live specimens in all in the Lower River and Phalombe/Mulanje	2.9 metres specimen taken from a village house near Mulanje	10
31	Naja haje	Naja annulifera	Snouted Cobra	Lower River and Phalombe/Mulanje	8 live specimens, quite variable in colour/banding	13
32	Elapsoidea sundevallii	Elapsoidea boulengeri	Zambezi Garter Snake	One specimen from Mpingwe		1

 $\textbf{Table VII:} \ \, \text{List of Species recorded including general location and species count} - \textit{Viperidae} - \text{Solenoglyphous} \, \, \\$

SN	Latin Name	Latin Name	English Name	Location	Comments	SC
Viperidae – Solenoglyphous – Vipers – Hinged Front Fanged Snakes						
33	Bitis arietans	Bitis arietans arietans	Puff Adder	Widespread, at one time I had eight of these in my collection. Colour variable	Female from Nyambadwe at 1.45 metres (a monster)	22
34	Causus rhombeatus	Causus rhombeatus	Rhombic Night Adder	Lower River to Southern lake most often at the ITC (Burn) dam Limbe	Often caught during grass cutting activities.	59
35	Causus defilippii	Causus defilippii	Snouted Night Adder	Shire Highlands		3
36	Vipera superciliaris	Proatheris superciliaris	Lowland Viper	Location Lake Chilwa	1966	1
37	Bitis gabonica	Bitis gabonica	Eastern Gaboon Viper	Mzuzu (on the way to the lake) and Viphya plateau	October 1967	2
38	Atractaspis bibronii	Atractaspis bibronii	Bibron's Stiletto Snake	Limbe Club and also Mpingwe		5

The following are some of the rarer recorded observations.

Crotaphopeltis tornieri (Figure 7) - Tornier's Cat-Snake

This is the first record of this species on the Nyika Plateau in 1999 and the first record south of the Misuku Mountains in northern Malawi.

Sex female

Length - 35cm

Dorsal MB – 17, Ventrals – 169, Anal entire, Paired Subcaudals – 51

Upper Labs – 8, 3,4 & 5 touching eye, Lower Labs – 10, Loreal – present, Post Occ – 2, Pre Occ – 1, Temporals 1 + 2

Eye Deep Yellow/Orange with vertically elliptic pupil

Location – Vitumbi Area: elevation 1905 m. 10° 49'08"S, 33° 56' 05"E.

This is an area of Miombo or *Brachystegia spectformis* woodland, with a low, open canopy 3-5 m high and a grass-covered forest floor.



Figure 7: Crotaphopeltis tornieri © Tim Brammer

Proatheris superciliaris (Figure 8) – Domino Bellied/Lowland Viper – location southern end of Lake Chilwa 1966 by KP. At that time thought to be the 6th or 7th record for Malawi, the specimen was 73cm long and collected swimming in the lake near reeds from a dugout. The specimen was a female and consumed frogs while in captivity. I had intended to release her after a couple of months of observation, but she died and was preserved, she had a huge parasite burden and was probably at the end of her natural lifespan. An American, whose name escapes me but was associated with the Biological Association of Malawi purchased my preserved collection in late December 1967 before my departure to the UK.



Figure 8: Proatheris superciliaris ©. Bernhard Schuster

Bitis gabonica (**Figure 9**) – Eastern Gaboon Viper: I observed two of these stunning vipers, both during a trip in October 1967, a large dead female at 1.36m, approx. Location 11° 31′ 23″ E, 34° 05′ 10.1″ S going up from Nkata Bay to Mzuzu in a lightly forested area of Kanangina forest at approx. 900m ASL. The snake had been killed by a panga, in a sloping field on the edge of lightly wooded mixed *Brachystegia*. The second also October 1967 was a beautifully marked male at 0.9m long, in the Montane forested slopes west-northwest of Luwawa Forest Lodge, Viphya Plateau, approx. Location 12° 05′ 56.4″ E, 33° 41′ 23.9″ S at about 1600m ASL and I almost stepped on him buried in the leaf litter.



Figure 9: Bitis gabonica © Rupert Wilkey

I would have collected him, but had nothing to keep him in, so after recording some measurements, he was returned to the forest. I imagine this environment has changed substantially and I do not know if they are still found anywhere near those locations.

Table VII: Bitis gabonica – Eastern Gaboon Viper specimen data

DATA	SPECIMEN	SPECIMEN	
	Bitis gabonica	Bitis gabonica	
Date	9th October 1967	13th October 1967	
Location	11°31′ 23″E - 34°05′ 10.1″S	12°05' 56.4″E - 33°41′ 23.9″S	
Sex	Female	Male	
Total Length (TL)	1360 mm	900 mm	
Snout Vent Length (SVL)	1292 mm	799 mm	
Length Tail	68 mm	101 mm	
Eye			
Elliptic	Yes Vertical	Yes Vertical	
Dentition			
Hinged Front Fang	Yes L 39mm	Yes Not measured	
Head Scales – Top			
Rostral	Yes – Small and Thin	Yes – Small and Thin	
Internasal	5	5	
Frontal	Interocular 16	Interocular 15	
Supraocular	Head between eyes 15	Head between eyes 13	
Head Scales – Side			
Circumocular	18	15	
Subocular	Between subo & UL 5	Between subo & UL 5	
Upper Labials	17	15	
Lower Labials	19 (3,4,5,6 T C S)	17 (4,5,6 T C S)	
Head Scales – Underside			
Sublingual (Chin Shields)	1 pr	1 pr	
Body			
Ventrals	140	127	
Dorsals (Keeled)	44 K inc 2 rows S	39 K inc 2 rows S	
Tail scales			
Anal Entire	Yes	Yes	
Subcaudals Paired	18	29	
Comment	2 scales between raised nasals, ~4 scales deep on male. ~1.5 scales deep on female.		

The population of Malawi was around 4.3 million in 1968, whereas according to the Worldometer, the population was almost 21.5 million in July 2024 with substantially more pressure on natural resources. Much of the Shire Highlands was still naturally afforested between 1956 and 1968. For example, Mpingwe, Soche, Chiradzulu, Zomba and Mulanje had large vibrant strips of montane forest bordering all the larger water courses, providing many different habitats and micro habitats for reptiles and amphibians. Recent photographs sadly show these habitats have all but disappeared as the hillsides have been denuded of trees for firewood, agriculture and urbanisation. A similar state of balance existed on the Viphya and north towards Mzuzu and Nyika. It was noticeable during our Nyika expedition in 1999, just how many of these habitats/microhabitats had been diminished or sadly disappeared completely.

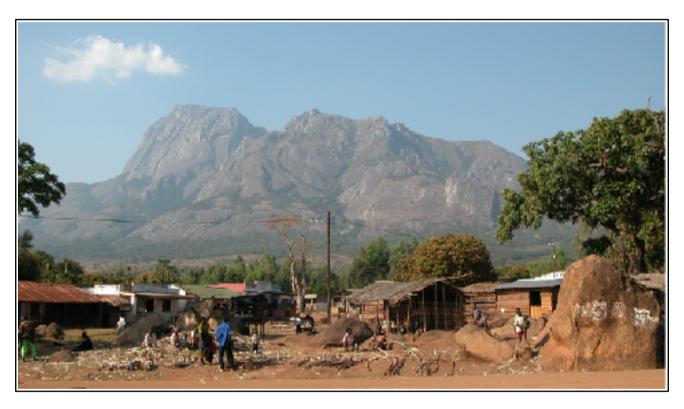


Figure 10: The majestic Mulanje Mountain – © <u>Britannia.com</u>

Acknowledgements

My thanks to my parents for allowing me the freedom to pursue my passion – little did they know! My friend Kent Pedder (KP) who often accompanied me when collecting, Desmond Nudi for his interest and commitment to bringing me snakes from the central region and all my Malawian friends who helped make this collecting and recording effort. Reasonable photos are sadly lacking from this epoch and I am indebted to Rupert Wilkey for providing me with Bernhard Schusters' and other photographs for this article.

There is a saying that Malawi is the "Warm Heart of Africa" Malawians made it so for me.

BIBLIOGRAPHY

Amphibia Web: accessed in June (2024): https://amphibiaweb.org/Malawi

Amphibia-Reptilia: Publication of the Societas Europaea Herpetologica, 14:(4), 395–409.

Branch, W. R. (1998): Field Guide to Snakes and other Reptiles of Southern Africa. London: New Holland, 328pp.

Branch, W.R., Bates, M. F. (2018): Donald George Broadley: Bibliography, taxonomic discoveries and patronyms, African Journal of Herpetology, 67:1, 15-42, DOI: 10.1080/21564574.2017.1349004

Broadley, D.G., Cock E.V. (1989): Snakes of Zimbabwe, (revised). Zimbabwe: Longman, 152pp.

Broadley, D.G. (1999): The Southern African Python. Python natalensis A. Smith I840 is a Valid Species. African Herp News. No 29.

Brown, G. (2020): Reptiles of Malawi. A Photographic Guide to. Njoka Books, 292pp.

FitzSimons, V.F.M. (1962): Snakes Of Southern Africa. Dunstable and London: Waterlow & Sons Limited, 423pp.

Halls et al (2000): SES Report 2000. Biosearch Nyika and the Scientific Exploration Society Nyika Expedition, 1999. Edited by Marianne J. Overton

Marais, J. (2004): A Complete Guide to the Snakes of Southern Africa. Second edition 2004. Cape Town, 8000. Struik Nature. 312pp.

Rasmussen, J.B. (1993): The Current Taxonomic Status of Tornier's Cat-Snake (Crotaphopeltis Tornieri).

Sweeney, R.C.H. (1961): Snakes of Nyasaland. The Nyasaland Society, Zomba, Nyasaland: The Government Printer, 200pp.

Sweeney, R.C.H. (1971): Snakes of Nyasaland, with new added corrigenda and addenda. Amsterdam: Asher & Co, 200pp.

The Reptile Database accessed July (2024): Malawi snakes species. https://reptile-database.reptarium.cz/search? search=Malawi+snakes&submit=Search

Wilkey, R.J., Terrell, R.J. (2019): Snakes of Malawi. A field guide to the snake species of Malawi, 5th edition 2019, Njoka Books, 325pp.