

Miscellanea Herpetologica Gabonica XIX

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Abstract

We present new Gabonese locality records, ecological and morphological data or unpublished museum specimens for *Kinixys erosa* (Trionychidae), *Trionyx triunguis* (Trionychidae), *Osteolaemus tetraspis* (Crocodylidae), *Agama agama* (Agamidae), *Varanus ornatus* (Varanidae), *Atractaspis boulengeri* (Atractaspididae), *Crotaphopeltis hotamboeia*, *Hapsidophrys smaragdinus*, *Philothamnus dorsalis*, *Toxicodryas blandingii* (Colubridae), *Naja melanoleuca* (Elapidae), *Psammophis mossambicus* (Psammophiidae), *Python sebae* (Pythonidae), *Atheris squamigera* (orange morph), *Bitis arietans*, *B. nasicornis* and *Causus maculatus* (Viperidae). We report predation cases by *Agama agama* and by *Toxicodryas blandingii* on the Black-and-white mannikin *Spermestes bicolor* (Aves: Estrildidae), by *Psammophis mossambicus* on *Agama agama*, by *Python sebae* on the African river martin *Pseudochelidon eurystomina* (Aves: Hirundinidae), and by *Atheris squamigera* on *Trachylepis* sp. (Squamata: Scincidae). A *Python sebae* observation brings to nine the number of reptile species recorded from caves in Gabon. We add three snakes to the herpetofaunal list of Nyanga Province, and one to that of Ogooué-Lolo Province. We reject a listing of *Dendroaspis viridis* (Elapidae) from Gabon. The only published Gabonese record of *Kladiostratus acutus acutus* (Psammophiidae), overlooked by Pauwels and Vande weghe (2008), is here confirmed as valid, bringing the current total number of reptile species recorded from Gabon to 131.

Keywords

Biodiversity, herpetofauna, Testudines, Crocodylia, Squamata, ornithology, Aves, Gabon, Equatorial Africa, arboreality.

Introduction

Apart from two records made in the frame of a herpetological survey led by PC for the Museo di Storia naturale del Salento, all new field observations compiled in the present, 19th, installment of the Miscellanea Herpetologica Gabonica were opportunistically made during non-herpetological activities. RO made his observations en route for archeological field studies and GM made his in the course of sociological surveys. LS's observation was made during ecotouristic activities, and MS made hers while performing ecological studies on forest elephants. GLD gathered snake observations while managing a cattle ranch in Nyanga

Province. QG made his while commuting to his study sites on the ecology of okoumé trees (*Aucoumea klaineana* Pierre). OSGP visited the herpetological collections of the natural history museum of Marseille in April 2023 in search of Gabonese material; a single specimen, a Dwarf crocodile, undoubtedly originates from Gabon and is reported below. Several other records presented below are drawn from non-herpetological, but nonfictional, difficult-to-find, literature that was excusably overlooked in the synthetic opus by Pauwels and Vande weghe (2008). They have to be taken into account because they are credible and unambiguous.

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Material and Methods

New photographic and voucher material was identified using the keys and morphological information provided by Laurent (1950) and Pauwels and Vande weghe (2008).

Abbreviations: Morphology: A = anal plate; AT = anterior temporals; D = divided; DSR = number of dorsal scale rows; IL = (number of) infralabials, followed in brackets by the number of IL in contact with the first pair of sublinguals; K = keeled; Lor = number of loreal scales; PoO = (number of) postoculars; PreO = (number of) preoculars; PV = (number of) prefrontals; S = single; SC = (number of) subcaudals; SL = supralabials, followed in brackets by the SL in contact with the orbit; SubO = number of suboculars; SVL = snout-vent length; TaL = tail length; U = unkeeled; VEN = (number of) ventral scales. Institutions: MHNM = Museum d'Histoire Naturelle de Marseille, Marseille, France; MNHN = Museum d'Histoire Naturelle de Paris, Paris, France; MSNS = Museo di Storia naturale del Salento, Calimera, Italy. Varia: asl = above sea level; Dept = Department; NP = National Park; Prov. = Province.

Results

Testudines

Testudinidae

Kinixys erosa (Schweigger, 1812)

In her doctoral thesis on the topic of infertility among the Fang ethnic group in Gabon, Akare Biyoghe (2010: 282-283) presented a photograph of a tortoise being released in Oyem, Woleu-Ntem Prov., after it had been used in a traditional treatment for barrenness. The turtle species was not identified in the thesis, but given the level of serration of the marginal scales, it is undoubtedly a subadult *Kinixys erosa*. See also under *Trionyx triunguis* below.

Trionychidae

Trionyx triunguis (Forskål, 1775)

In 2012, during sociological investigations led by a World Wildlife Fund team, GM photographed an adult individual (Figure 1) caught by villagers in Minkébé NP, Haut-Ntem Dept, Woleu-Ntem Prov., along the Ivindo River (2°01'25.4"N,



Figure 1. Adult *Trionyx triunguis* caught in Minkébé National Park, Woleu-Ntem Prov., northeastern Gabon. Photograph by G. Mabaza.

13°15'38.0"E), in the area where it marks the border with the Republic of Congo. The Nile softshell turtle had already been recorded from the park, but this is the first documented record with a precise locality. In an unpublished report on Minkébé NP, Obame Ondo (2011: 33) provided the photograph of a "*Trionyx* sp.," which actually represents a tortoise of the genus *Kinixys*. Akani, Eniang et al. (2018) published a series of Gabonese localities for *Trionyx triunguis*, including the new localities Mayonami (Basse-Banio Dept, Nyanga Prov.) and Tranquille, and they presented the photograph of an adult individual butchered for food consumption along Ndogo Lagoon in Gamba (Ndougou Dept, Ogooué-Maritime Prov.). The location of Tranquille was not specified and is not shown on maps of Gabon; this locality, along the road from Lambaréné to Fougamou, actually lies in Ogooué et Lacs Dept in Moyen-Ogooué Prov.; its coordinates are 0°48'36.0"S, 10°21'36.0"E, and its altitude is 70 m asl (Laurent Chirio, pers. comm. to OSGP). New locality record (Pauwels, Albert et al., 2017).

Crocodylia

Crocodylidae

Crocodylus niloticus Laurenti, 1768

In their synthetic work on the reptiles of Gabon, Pauwels and Vande weghe (2008) overlooked Nile crocodile records in the biographic novel by Goulphin (2018) originally published in 1987. This opus (loc. cit.: 11, 71, 169, 172, 176) mentioned observations of Nile crocodiles made in Iguéla and in Louri Lagoon, Etimboué Dept, Ogooué-Maritime Prov., in the 1970s. Goulphin also reported (loc. cit.: 13-14) the testimony by the French guide Henri Guizard of the killing of a female villager by a large Nile crocodile in a fishing village between Port-Gentil and Fernan Vaz, in Ogooué-Maritime Prov. The young woman was scaling a bucket of fish in the early morning at the edge of the lagoon when she was seized at the hip and dragged into deep waters.

Osteolaemus tetraspis Cope, 1861

OSGP examined a dry, mounted specimen (MHNM 16816) which was prepared by a taxidermist of the Université Nationale in Libreville in 1975. The crocodile had been previously brought to Michel Auriault and kept alive in his garden near Libreville. Its total length is about 120 cm. It was collected in Gabon, but the exact locality is unknown. Auriault used to work as an entomologist at the Université Nationale in the 1970s and published a series of papers on Gabonese ceratopogonid flies, a.k.a. *fourous* in French.

Agamidae

Agama agama (Linnaeus, 1758)

On 17 July 2021 LS photographed an adult male Red-headed agama preying on a chick of a Black-and-white mannikin (Aves: Estrildidae: *Spermestes bicolor* (Fraser, 1843) (Figure 2). The observation took place on the beach (0°19'46.0"N, 9°19'29.0"E) of the hotel restaurant *La Baie des Tortues Luths*, on Pointe Denis, Komo-Océan Dept, Estuaire Prov. Gabonese populations of this agama species have a very eclectic diet, including insects, bread crumbs and fruits (Pauwels, Burger et al., 2004; Pauwels and David, 2008a; Delsinne et al., 2015; Pauwels, Albert et al., 2017; Pauwels, Bahaa-el-din et al., 2018), but this represents the



Figure 2. Adult male *Agama agama* preying on a Black-and-white Mannikin, *Spermestes bicolor*, on Pointe Denis, Estuaire Prov. Photograph by L. Sineux.

first record of predation on a bird. See also under *Psammophis mossambicus* below.

Varanidae

Varanus ornatus (Daudin, 1803)

Pauwels and Vande weghe (2008) overlooked a record of a “*Varan du Nil*” in Donghila (= Donguila, 0°12'14.9"N, 9°44'23.6"E, Komo Mondah Dept, Estuaire Prov.) in the ethnological book of Briault (1930: 79-80). They also did not include an Ornate monitor record made in the narrative of the explorations by de Compiègne (1875: 255) from the largest of the “*neng* (îles) Ingoway” (Ingoway islands). Compiègne mentioned that “à chaque pas nous faisons lever sous nos pieds d’énormes iguanes” (at each of our steps enormous monitors were fleeing), indicating a high density of monitors on this island, which served as a roost for numerous species of birds. The text and the map provided in this book allow locating this island in the southeastern part of Lac Onangué (aka Lake Onague, Ogooué & Lacs Dept, Moyen-Ogooué).

Atractaspididae

Atractaspis boulengeri Mocquard, 1897

The juvenile individual MSNS Rept 302 was collected during the period November 2016 – March 2017 on the road to Ipassa Research Station (ca. 0°31'15.2"N, 12°47'58.3"E), Ivindo NP, Ivindo Dept, Ogooué-Ivindo Prov. Its main morphological characters are given in Table 1. The 1st SL is not in contact with the postnasal. Its temporal formula is 1+3 on both sides. It has a single pair of sublinguals, not fused with the 2nd IL. It is to be



Figure 3. Adult *Crotaphopeltis hotamboeia* in defense position near Tchibanga, Nyanga Prov., southwestern Gabon. Photograph by A. E. Ruizendaal.

noted that the mental scale is separated from the sublinguals. Its umbilical scar is visible on VEN 184-186. This is the second record of this rare snake from the core area of Ivindo NP (Carlino and Pauwels, 2015; Pauwels, Le Garff et al., 2016).

Colubridae

Crotaphopeltis hotamboeia (Laurenti, 1768)

An adult individual was found active by day by AER on 12 June 2023 in the garden of a house (2°57'35.8"S, 10°59'45.9"E) in the suburbs of Tchibanga in Mougoutsi Dept, Nyanga Prov. (Figure 3). Its total length was about 60 cm. Disturbed, it immediately adopted a defensive posture, raising its fore body. It is the first time the White-lipped cat snake is recorded from Nyanga Prov. (see the closest records in Pauwels and Vande weghe, 2008; and Pauwels, Bamba Kaya et al., 2020).

Hapsidophrys smaragdinus (Schlegel, 1837)

In 2019 RO photographed a Common emerald snake along the RN3 road in Boundji (ca. 0°48'08.1"S, 12°34'53.5"E), Mouloundou Dept, Ogooué-Lolo Prov. (Figure 4). New locality record (Pauwels and Vande weghe, 2008; Pauwels, Carlino et al., 2016; Pauwels, Pauly et al., 2020). This snake is the most commonly observed in Gabon, but precisely because it is so common, few take the pain to document it, and proportionally a limited number of verifiable records are available.

Philothamnus dorsalis (Barboza du Bocage, 1866)

On 2 August 2023 AER encountered an adult individual active by day on a shrub in his garden (2°57'35.8"S, 10°59'45.9"E)

Table 1. Morphological data for preserved snakes from Gabon. For abbreviations see Materials and Methods.

Species / Specimen	Sex	SVL (mm)	TaL (mm)	DSR	PV+VEN	A	SC	SL	IL	Lor	PreO	SubO	PoO	AT
Atractaspididae														
<i>Atractaspis boulengeri</i>														
MSNS Rept 302	Juv.	196	18	21-21-17,U	2+200,U	S	1D+5S+19D,U	5(3-4)/5(3-4)	5(3)/5(3)	0/0	1/1	0/0	1/1	1/1
Colubridae														
<i>Toxicodryas blandingii</i>														
MSNS Rept 300	M	717	210	23-25-15,U	1+268,K	D	133,D,U	9(4-6)/9(4-6)	12(4)/12(4)	1/1	2/2	0/0	4/4	2/2
MSNS Rept 301	M	823	235	23-23-15,U	1+265,K	“D”	138,D,U	10(5-7)/9(4-6)	13(4)/13(4)	1/1	2/2	0/0	2/2	2/2



Figure 4. Live adult *Hapsidophrys smaragdinus* in Boundji, Ogooué-Lolo Prov., central-eastern Gabon. Photograph by R. Oslisly.

near Tchibanga in Mougoutsi Dept, Nyanga Prov. (Figure 5). New prov. record. In Gabon, the Stripe-backed bush snake has been rarely documented so far, only from the provinces of Moyen-Ogooué and Ogooué-Maritime (Pauwels and Vande weghe, 2008; Pauwels and Sallé, 2009).

Toxicodryas blandingii (Hallowell, 1844)

The subadult males MSNS Rept 301-302 were caught during the period November 2016 – March 2017 on the road to Ipassa Research Station (at ca. 0°31'15.2"N, 12°47'58.3"E), Ivindo NP. Their main morphological data are provided in Table 1. The temporal formula of MSNS Rept 301 is 2 + 2 + 4 (left) / ((1 + 1)/1) + 3 + 4 (right). The anal scale of MSNS Rept 301 is semi-divided; the division is located on the anterior part of the scale and is interrupted at its mid-length. The stomach of MSNS Rept 301 contains two young Black-and-white mannikins *Spermestes bicolor* (Aves: Estrildidae), most probably taken by the snake from the nest. This snake and this bird species are both already known from Ivindo NP (Carlino and Pauwels, 2015; Christy and Vande weghe, 2016). This is the first record of predation of Blanding's tree snake on the Black-and-white mannikin (see a compilation of diet records, including other *Spermestes* spp., in Greenbaum et al., 2021).

Elapidae

Dendroaspis viridis (Hallowell, 1844)

In their ethnobotanical study on the plants traditionally used in the area of Bissok, Woleu Dept, Woleu-Ntem Prov., northern Gabon, to cure snakebites, Mengome et al. (2021) listed *Dendroaspis viridis* as one of the species liable to inflict bites in that region. The Green mamba had already been listed for Gabon in a medical study by Tchoua et al. (2002) but their record was rejected by Pauwels and David (2008b). The geographic distribution of the Green mamba is actually restricted to West Africa, from the Gambia to Nigeria, and the only mamba species found in Gabon is Jameson's mamba, *Dendroaspis jamesoni jamesoni* (Traill, 1843) (Trape, 2023).

Naja melanoleuca Hallowell, 1857

QG photographed an adult individual on a laterite road (ca. 0°46'00.0"S, 12°54'00.0"E) near Bambidié, in a concession of the *Compagnie Equatoriale des Bois* (CEB), Mouloundou Dept, Ogooué-Lolo Prov. (Figure 6). It had been run over by a logging truck. New record for Ogooué-Lolo Prov., the last Gabonese



Figure 5. Live adult *Philothamnus dorsalis* near Tchibanga, Nyanga Prov., southwestern Gabon. Note the typical dark brown vertebral stripe. Photograph by A. E. Ruizendaal.

province from which this medically important cobra species had not yet been documented (see records for all other provinces in Pauwels and Vande weghe, 2008; Pauwels and Sallé, 2009; Pauwels, Biyogho Bi Essono et al., 2017).

Psammophiidae

Kladirostratus acutus acutus (Günther, 1888)

In their paper describing *Rhamphiophis maradiensis*, Chirio and Ineich (1991: 220, 228-229) listed and illustrated as comparative material (under *Rhamphiophis acutus*) an individual housed in the collections of the Paris Museum (MNHN 1933-70), originating from "Gabon, rivière Lehou, Haut Ogooué." The Léwou is an affluent of the Passa River (confluence point at 1°44'02.6"S, 13°50'14.8"E) flowing from Plateaux Dept to Djouori-Agnili Dept in Haut-Ogooué Prov. near the border with the Republic of Congo. Chirio and Ineich mentioned that the specimen was a female with 180 VEN, a SVL of 720 mm, and an incomplete, 109 mm long, tail. They provided detailed drawings of the right profile and of the upper and lower surfaces of its head, and of its dorsal scales, showing a round pupil, a markedly pointed rostral, two internasals, two prefrontals, a frontal longer than wide, a divided nasal, one Lor, two PreO, three PoO, 8(4-5) SL, two AT, nine IL, two pairs of elongate sublinguals of which the anterior one is the longest, one PV, a non-widened vertebral row, and a dorsal pattern with two dark stripes. All these characters indeed agree with the definition of *Kladirostratus acutus acutus*. This record was overlooked by Pauwels and Vande



Figure 6. Dead on road adult *Naja melanoleuca* in Bambidié, Ogooué-Lolo Prov., central Gabon. Photograph by Q. Guidosse.

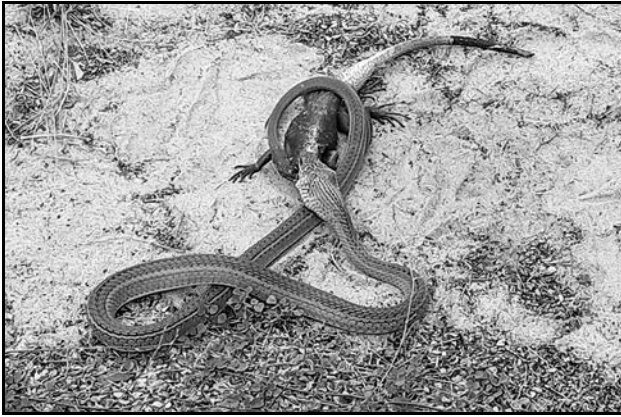


Figure 7. Adult *Psammophis mossambicus* preying on an adult male *Agama agama* near Omboué, Ogooué-Maritime Prov., western Gabon. Photograph by J. M. Cleuet.

weghe (2008) who had listed this species among the reptile taxa listed but unconfirmed for Gabon. With the inclusion of this species, the list of reptile species documented for Gabon reaches 131 (see the compilation of recent records for the herpetofauna of Gabon by Pauwels, Morelle et al., 2019).

Psammophis mossambicus Peters, 1882

On 12 July 2023, JMC encountered an adult Mozambique sand snake preying on an *Agama agama* near Omboué, Etimboué Dept, Ogooué-Maritime Prov. (Figure 7). The prey is an adult male in nuptial colors, showing an orange head, and a tail successively whitish, orange and black. A compilation of the Gabonese predation records by *Psammophis mossambicus* was presented by Pauwels, Gillet et al. (2018); it is very eclectic, including amphibians, birds and reptiles, among which *Agama agama* was already included. New locality record; within the province, the closest locality from which this snake has been recorded is Iguéla (Pauwels, Théleste et al., 2023).

An adult individual was photographed on 23 March 2023 by GLD near offices (3°11'05.0"S, 11°21'58.0"E) in Ranch Nyanga, Mongo Dept, Nyanga Prov. (Figure 8). New dept record. Within Nyanga Prov., the Mozambique sand snake has already been recorded from Haute-Banio Dept (Pauwels, Gillet et al., 2018).



Figure 9. Live adult *Python sebae* in Lembé, Ogooué-Maritime Prov., western Gabon. Photograph by R. Oslisly.



Figure 8. Adult *Psammophis mossambicus* freshly killed in Nyanga Ranch, Nyanga Prov., southwestern Gabon. The body is visible in dorsal view; the head, nearly cut off from the body, is visible in ventral view. Photograph by G. L. Dibanganga.

Pythonidae

Python sebae (Gmelin, 1789)

In 2006 RO photographed by day an adult Seba's python in a secondary forest in Lembé (1°17'36"S, 9°38'43"E), Bendjé Dept, Ogooué-Maritime Prov. (Figure 9). On 16 July 2021 GDB encountered an individual on the road (0°06'02.65"S, 11°24'27.51"E) near Ayem along the northern bank of the Ogooué River, between the villages of Kazamabika and Junkville (Figure 10). This locality is still within the northern buffer zone of Lopé NP, Lopé Dept, Ogooué-Ivindo Prov. New locality records (Pauwels and Vande weghe, 2008; Pauwels, Carlino et al., 2017).

Marche (1878: 406) reported python-related observations on Babongo pygmies he made in the Lopé area along the Ogooué. He mentioned that the Babongo regularly hunt pythons, especially around July, by setting fire to bushes and killing with spears the pythons that try to escape. He also mentioned that the Babongo also sold python meat to the Okanda people, who prepared it in soup.

Goulphin (2018: 83) reported the observation by the guide Henri Guizard of a 7-m-long python killed in a henhouse in Iguéla, Etimboué Dept, Ogooué-Maritime Prov., in the stomach of which five chickens were found, and of two other large pythons in the same locality, of which one was about six meters long (loc. cit.: 87-89). Guizard (in loc. cit.: 84) said that a python he killed in the Cristal Mounts measured precisely 10.08 m in



Figure 10. Live *Python sebae* in the northern buffer zone of Lopé National Park, Ogooué-Ivindo Prov., central Gabon. Photograph by G. De Bruyne.



Figure 11. Tsoumbou Cave near Ndendé, Ngounié Prov., southwestern Gabon. Flying bats are visible. Photograph by R. Oslisly.

total length; he noted that the size of its head was comparable to that of a sheep. He also mentioned (in loc. cit.: 85) a 6.5 m long python lying on a forest path and another large one in a swamp, both in Ozouri (= Ozori), Bendjé Dept, Ogooué-Maritime Prov. He killed a python nearly seven meters long on the road between Fougamou and Ndendé, in Ngounié Prov. (loc. cit.: 89-91). About the epic combat between a python and an elephant described by Jean Michonnet in his autobiographical novel *La mémoire du fleuve*, Guizard (in loc. cit.: 86) commented that it probably involved “*un tout petit éléphant et un très grand python*” (“a very small elephant and a very large python”).

Guizard (in loc. cit.: 179) mentioned that while managing the “*Réserve de la Tsoumbou*” in Ndendé (Dola Dept, Ngounié Prov.), he encountered a large python in a nearby cave called Banguinbou. This cave most probably corresponds to what is today called the Tsoumbou Cave (2°36'49.4"S, 11°28'17.1"E; Figure 11) near a former camp called Tsoumbou within the former fauna reserve of Tsoumbou. Given its geographic location, it belongs to the Ngounié-Nyanga Synclinorium (Pauwels, Carlino et al., 2019), and was formed within the *formation géologique schisto-calcaire NSC3*. This snake species had not been included in the compilation of reptile and amphibian records from Gabon caves by Pauwels, Carlino et al. (2019; see also Pauwels, Pauly et al., 2020); it is the ninth reptile species found so far in a cave in Gabon. Guizard (in loc. cit.: 180) mentioned that during the rainy season, the large room of the cave contains a pool.

Guizard (in loc. cit.: 265-266) killed in Iguéla a 1.5-m-long python which had its head in a bird burrow in the ground; while dying the python regurgitated two birds. These birds are described as “little blue birds,” “little blue arrows in the sky,” nesting in colonies in the ground. The bird is not identified in the book, but we regard it as the African river martin, *Pseudochelidon eurystomina* Hartlaub, 1861 (Aves: Hirundinidae), which shows dark blue color on its wings. It is a Lower Guinea endemic bird, nesting on the coasts and sandbanks from Gabon to Congo. This bird has suffered from heavy predation by humans, especially children, that led to the eradication of numerous nesting colonies; Iguéla and Loango NP are today among the last remaining safe nesting places for this species.



Figure 12. Freshly dead, orange subadult *Atheris squamigera* killed by villagers with a machete, revealing its stomach contents, an adult *Trachylepis* sp. Photographed by M. Scalbert near Lifouta in Ogooué-Lolo Prov., eastern Gabon.

Interestingly, Lehmann et al. (2020) reported that pangolins and pythons sometimes shared underground burrows in Lopé NP, and that they observed a python nesting in one of these burrows.

Viperidae

Atheris squamigera (Hallowell, 1856)

A subadult individual was killed on 17 March 2021 by villagers in a forest (about 1°6'7.0"S, 13°11'2.9"E) about 8 km SE of Lifouta, near the Ogooué River, Mouloundou Dept, Ogooué-Lolo Prov., while it was resting on a branch at about 1.5 m above the ground. The open wounds revealed the freshly ingested stomach contents of the viper, an adult skink of the genus *Trachylepis* Fitzinger, 1843 (Squamata: Scincidae) (Figure 12). The viper belongs to the uncommon uniformly orange morph, mentioned for the first time from Gabon by Pauwels, Le Garff et al. (2016) from Estuaire Prov., then again from Ogooué-Ivindo Prov. (Pauwels, Carlino et al., 2017). *Atheris squamigera* has already been mentioned from three localities in Mouloundou Dept, all based on green individuals (Pauwels, Chirio et al., 2017; Pauwels, Zwerts et al., 2021).

Bitis arietans (Merrem, 1820)

A subadult individual (Figure 13) was photographed on 22 July 2023 by GLD in an open area (3°19'05.0"S, 11°34'27.0"E) in



Figure 13. Freshly dead subadult *Bitis arietans* in Nyanga Ranch, Nyanga Prov., southwestern Gabon. Photograph by G. L. Dibanganga.



Figure 14. Live adult *Bitis nasicornis* under a rotten log in Haut-Ogooué Prov., eastern Gabon. Photograph by M. Scalbert.



Figure 15. Live adult *Bitis nasicornis* resting on branches at about 1.9 m above the ground in Ogooué-Lolo Prov., eastern Gabon. Photograph by M. Scalbert.

Ranch Nyanga, Mongo Dept, Nyanga Prov. New dept record. Within Nyanga Prov., the Puff Adder was already known from the departments of Douigni, Doutsila and Mougoutsi (Pauwels, Ibouili et al., 2012; Pauwels, Carlino et al., 2017).

Bitis nasicornis (Shaw, 1802)

On 8 January 2020 MS photographed an adult individual (Figure 14) partly hidden under a rotten log in a forest (ca. 0°42'8.4"S, 13°33'24.6"E) about 11 NW of Mbounga, Sébé-Brikolo Dept, Haut-Ogooué Prov. New dept record (see Pauwels, Morelle et al., 2019, for records in Haut-Ogooué Prov.). On 18 February 2020 an adult individual (Figure 15) was found by MS resting on branches at 1.9 m above the ground in a forest (ca. 0°47'38.4"S, 13°27'32.3"E) at 13 km W of Mbounga, Mouloundou Dept, Ogooué-Lolo Prov. New locality record (see Pauwels, Zwerts et al., 2021). *Bitis* spp. are massive, terrestrial vipers, but there are some observations of arboreality in *B. nasicornis* (Shine and Spawls, 2020), although rarely documented, especially not for adult individuals.

Causus maculatus (Hallowell, 1842)

On 19 November 2011 an adult individual was killed in a garden (2°57'35.8"S, 10°59'45.9"E) near Tchibanga in Mougoutsi Dept, Nyanga Prov. (Figure 16). New prov. record, although expected, because this viper has already been recorded in Conkouati in the Republic of Congo (Pauwels and Vandeweghe, 2008; Pauwels, Biyogho Bi Essono II et al., 2017; Pauwels, Pauly et al., 2020).

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Figure 16. Freshly killed adult *Causus maculatus* near Tchibanga, Nyanga Prov., southwestern Gabon. Photograph by A. E. Ruizendaal.

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An entry was missing from the Literature Cited in the article by Palis et al. that appeared in the October issue of the CHS *Bulletin*. A citation for that missing entry and a full citation for the article in question appear below.

- Garton, J. S., and R. A. Brandon. 1975. Reproductive ecology of the green treefrog, *Hyla cinerea*, in southern Illinois (Anura: Hylidae). *Herpetologica* 31(2):150-161.
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