

The
**HERPETOLOGICAL
BULLETIN**

Number 84 – Summer 2003



PUBLISHED BY THE
BRITISH HERPETOLOGICAL SOCIETY

Distributional comments on some members of the herpetofauna of the Mosquitia, Honduras

LARRY DAVID WILSON¹, JAMES R. MCCRANIE², STEVE GOTTE³,
and JOSIAH H. TOWNSEND⁴

¹ *Department of Biology, Miami-Dade Community College, Kendall Campus, Miami, Florida 33176-3393, USA. E-mail: lwilson@mdcc.edu [author for correspondence]*

² *10770 S.W. 164th Street, Miami, Florida 33157-2933, USA*

³ *USGS Patuxent Wildlife Research Center, National Museum of Natural History, MRC 111, 10th Street and Constitution Avenue, NW, Washington, DC 20560-0111, USA*

⁴ *Division of Herpetology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611, USA*

THE herpetofauna of the Mosquitia, the eastern lowlands of Honduras, has been traditionally the least well known in the country. Our recent fieldwork, however, has been directed largely toward improving our knowledge of the composition and distribution of the amphibians and reptiles of this important region of Honduras (Nicholson et al., 2000; McCranie et al., 2001; McCranie et al., 2002). During July and August of 2002, we spent five weeks in the eastern portion of the Mosquitia. We surveyed three areas, all of which have or are proposed to be designated as protected areas within Honduras. These three areas are the Río Kruta Biological Reserve, the Rus Rus Biological Reserve, and the Tawahka-Asangni Biosphere Reserve.

From 9th-11th July, we collected in the lower reaches of the Río Kruta, a river arising in the Llanos de Iltara and emptying into the Caribbean Sea at Barra Kruta and Cocotingni between Laguna de Caratasca and Cabo de Gracias a Dios. The area in which we worked is located within the Río Kruta Biological Reserve. From 12th-27th July, we worked in the environs of Rus Rus, a Miskito village on the road between Puerto Lempira on the shore of Laguna de Caratasca and Awasbila on the Río Coco. Our work was centered in the immediate vicinity of Rus Rus and at a hunting

camp known as Bodega de Río Tapalwás, located along the Río Tapalwás, a tributary of the Río Rus Rus, both localities being located within the proposed Rus Rus Biological Reserve. From 30th July to 6th August, we sampled the herpetofauna in the region of Caño Awalwás, a tributary of the Río Coco located within the Tawahka-Asangni Biosphere Reserve. Voucher specimens of the specimens collected will be deposited at the National Museum of Natural History, Smithsonian Institution, Washington, DC, USA.

Agalychnis calcarifer Boulenger

This species has been known heretofore from Honduras on the basis of a single adult specimen from near Baltituk, on the Río Plátano, Depto. Gracias a Dios, and a series of tadpoles and eggs taken at Quebrada El Guásimo, Depto. Olancho, along the Río Patuca (McCranie & Wilson, 2002). A second adult specimen (Fig. 1) was collected by us at Bodega de Río Tapalwás (Bodega from this point onward), Depto. Gracias a Dios, at 190 m elevation on 17th July 2002. This specimen documents the occurrence of *A. calcarifer* in the Río Coco drainage. The specimen is an adult female with a snout-vent length of 68.9 mm. It was collected at night (21:00 hrs) on the frond of an understory palm.



Figure 1. *Agalychnis calcarifer*. All photographs except Figure 3 by J.R. McCranie.



Figure 2. *Corallus annulatus*.



Figure 3. *Rhinoclemmys funerea*.
Photograph ©J. H. Townsend.

Anothea spinosa (Steindachner)

Only a single specimen of this hylid frog has been known heretofore from Honduras, taken at the confluence of Quebrada Siksatará with the Río Wampú (Río Patuca drainage) Depto. Olancho (McCranie & Wilson, 2002). On 16th July 2002, we found a second specimen (see front cover) at Bodega at 190 m elevation. The specimen, an adult male with a snout-vent length of 61.4 mm, was collected at night (20:50 h) while sitting on a vine a little above head height alongside a trail. As with the specimen of *Agalychnis calcarifer* discussed above, this specimen documents the occurrence of *Anothea spinosa* in the department of Gracias a Dios and in the drainage of the Río Coco.

Rhinoclemmys funerea (Cope)

The presence of this aquatic turtle in Honduras has been based on a single specimen from the Río Coco near Krasa, Nicaragua (Meyer & Wilson, 1973). Given the fluid nature of the political border between Honduras and Nicaragua along the Río Coco, it is not entirely clear whether this specimen originated on the Honduran or the Nicaraguan side of the river. On 4th and 5th August 2002, two specimens of this turtle were collected in the region of Caño Awalwás at 90 and 100 m elevation. One specimen (Fig. 3) was collected during the day by snorkeling at the mouth of the river (caño in Miskito). The other, the larger of the two, was collected at night while feeding on leafy vegetation along a tributary river of the Caño



Figure 4. *Dendrophidion vinitor*



Figure 5. *Leptophis nebulosus*



Figure 6. *Pliocercus euryzonus*

Awalwás. This turtle, called tortuga negra, is well known to the locals, is purported to be widely distributed in tributaries of the Río Coco, and is actively hunted for its meat during the dry season when the water in the rivers is relatively clear.

Corallus annulatus (Cope)

In June 2001, Franklin E. Castañeda collected an adult specimen of *Corallus annulatus* in the Rus Rus region at Bodega, Depto. Gracias a Dios, in northeastern Honduras. The specimen was collected at 190 m elevation at 22:00 hrs as it was crawling down a vine leading to the canopy. This specimen unequivocally establishes the presence of this species in Honduras (McCranie et al., 2002). On 3rd August 2002, a second specimen (Fig. 2) was collected by us at Caño Awalwás, at an elevation of 100 m. This specimen is a juvenile and was found active in a tree at night (20:50 hrs) about 4 m above a small river feeding into the caño.

Dendrophidion vinitor Smith

Wilson & Meyer (1985) indicated by an asterisk behind the name *vinitor* in their key to Honduran species of *Dendrophidion* that this taxon was not then known from Honduras, but could be expected to be eventually found there. On 21st July 2002, we collected a single adult specimen (Fig. 4) of *D. vinitor* at Bodega at an elevation of 190 m. The specimen was crawling on the forest floor at about 12:00 hrs. In addition, on 3rd August 2002, we found a single juvenile specimen of this snake at Caño Awalwás at an elevation of 100 m. This specimen was sleeping on low vegetation at night. A third specimen was collected by Tomás Manzanares Ruís on 30th February 2002 at Crique Ibantara (near Rus Rus) at an elevation of 70 m. These three records support the recognition of *D. vinitor* as part of the Honduran snake fauna.

Leptophis nebulosus Oliver

This species has been known heretofore from Honduras on the basis of a single specimen from Patuca, Depto. Gracias a Dios (Wilson & Meyer, 1985). This old specimen was collected 24th July 1891. On 9th July 2002, we collected a second specimen (Fig. 5) from Krahkra, Depto. Gracias a Dios, on the Río Kruta, at an elevation of 5 m. It was found sleeping at night (about 22:00 hrs) on a frond of a thorn palm growing in a swamp. Oliver (1948) and Savage (2002) gave a range of 150-160 ventrals and 146-151 subcaudals for *L. nebulosus*. The new Honduran specimen is a female with 146

ventrals and 134 subcaudals, thus extending the known variation in these two characters.

Pliocercus euryzonus Cope

Wilson & Dugas (1972) reported this species from Honduras on the basis of a single specimen from Tela, Depto. Atlántida. Savage & Crother (1989) identified the same specimen as *P. elapoides* and Smith & Chiszar (1996) considered it representative of their *P. dimidiatus*. Our opinion is that this specimen is a *P. euryzonus* with erroneous locality data. Tela was the location of a serpentarium and was used as the locality for many specimens that actually originated in other locales (see the discussion in McCranie & Wilson, 2002, about a specimen of the frog *Hyla crepitans* purported to be from Tela). We suspect this is also the case with the specimen reported by Wilson & Dugas (1972). As such, the specimen we report herein is the first definitive evidence that *P. euryzonus* is part of the Honduran snake fauna. This specimen (Fig. 6) was collected at 100 m elevation at Caño Awalwás, Depto. Gracias a Dios on 3rd August 2002. It was found at night (21:50 hrs) as it was crawling on a steep bank above a small tributary river of the Caño Awalwás. Savage & Crother (1989), Wilson & McCranie (1997), and Wilson et al. (1996) have all espoused that further collecting in eastern Honduras in the hiatus between the two nominal forms of *Pliocercus* may demonstrate that these two forms are conspecific. Subsequently, we collected two additional specimens of *Pliocercus* in eastern Honduras that, contrarily, seem to strengthen the recognition of both *P. elapoides* and *P. euryzonus* as distinct species. One specimen collected at Quebrada Machín, Depto. Colón, resembles the other Honduran populations of *P. elapoides* to the west in having the red rings longer than the black rings (it has an incomplete tail). The second specimen from Caño Awalwás, Gracias a Dios, resembles *P. euryzonus* from Nicaragua to northern South America in having the black rings longer than the red rings. The latter specimen has a complete tail with 119 subcaudals. That number is four subcaudals more than the maximum number recorded for *P. elapoides* by Savage & Crother (1989), but lie near the upper limits for *P.*

euryzonus given by Savage & Crother (1989) and Savage (2002). The colour pattern of the Honduran specimen of *P. euryzonus* is indistinguishable from specimens of this species from Nicaragua, Costa Rica, and western Panama (see plate 405 in Savage, 2002, fig. 246 in Köhler, 2001, and fig. 1 in Smith & Chiszar, 2001).

ACKNOWLEDGEMENTS

We would like to express our gratitude to our field companions Franklin and Nereyda Castañeda and Tomás Manzaneros Ruís for assistance with the fieldwork during which the specimens reported here were collected. We also thank Víctor Leonel Archaga, Leonel Marineros, and Anarda Maribel Rodríguez of the Tegucigalpa COHDEFOR office for their help in the issuance of collecting permits for this fieldwork. In addition, Mario R. Espinal and Franklin Castañeda assisted us in obtaining the necessary collecting permits. Finally, we are indebted to Michael S. Gaines and Robert Pope, for the support provided to the first author during a research leave at the University of Miami under NIGMS (National Institute of General Medical Science) Grant No. 1R25GM0083-02 and HHMI (Howard Hughes Medical Institute) Grant No. 711995-14104.

REFERENCES

- Köhler, G. (2001). *Anfibios y Reptiles de Nicaragua*. Offenbach, Germany: Herpeton.
- McCranie, J.R., Castañeda, F.E. & Nicholson, K. E. (2002). Preliminary results of herpetofaunal survey work in the Rus Rus region, Honduras: a proposed biological reserve. *Herpetol. Bull.* **81**, 22-29.
- McCranie, J.R., & Wilson, L.D. (2002). *The Amphibians of Honduras. Soc. Study Amphib. Reptiles, Contrib. Herpetol.* **19**, i-x, 1-625.
- McCranie, J.R., Wilson, L.D., & Gotte, S.W. (2001). Three new country records for Honduran snakes. *Herpetol. Rev.* **32**, 62-63.
- Meyer, J.R., & Wilson, L.D. (1973). A distributional checklist of the turtles, crocodylians, and lizards of Honduras. *Contrib. Sci., Nat. Hist. Mus. Los Angeles Co.* **244**, 1-39.
- Nicholson, K.E., McCranie, J.R. & Köhler, G. (2000). Herpetofaunal expedition to Parque Nacional Patuca: a newly established park in Honduras. *Herpetol. Bull.* **72**, 26-31.
- Oliver, J. A. (1948). The relationships and zoogeography of the genus *Thalerophis* Oliver. *Bull. Amer. Mus. Nat. Hist.* **92**, 157-280.
- Savage, J.M. (2002). *The Amphibians and Reptiles of Costa Rica. A Herpetofauna between Two Continents, between Two Seas*. Chicago, Illinois: Univ. Chicago Press.
- Savage, J.M., & Crother, B.I. (1989). The status of *Pliocercus* and *Urotheca* (Serpentes: Colubridae), with a review of included species of coral snake mimics. *Zool. J. Linn. Soc.* **95**, 335-362.
- Smith, H.M., & Chiszar, D. (1996). *Species-Group Taxa of the False Coral Snake Genus Pliocercus*. Pottsville, Pennsylvania: Ramus Publ., Inc.
- Smith, H.M., & Chiszar, D. (2001). *Pliocercus dimidiatus*. *Cat. Amer. Amphib. Reptiles* 738.1-738.3.
- Wilson, L.D., & Dugas, D.D. (1972). *Pliocercus euryzonus* Cope: an addition to the snake fauna of Honduras. *Bull. So. California Acad. Sci.* **71**, 159.
- Wilson, L.D., & McCranie, J.R. (1997). Publication in non-peer-reviewed outlets: the case of Smith and Chiszar's 'Species-Group Taxa of the False Coral Snake Genus *Pliocercus*'. *Herpetol. Rev.* **28**, 18-21.
- Wilson, L.D., McCranie, J.R. & Espinal, M.R. (1996). Coral snake mimics of the genus *Pliocercus* (Family Colubridae) in Honduras and their mimetic relationships with *Micrurus* (Family Elapidae). *Herpetol. Nat. Hist.* **4**, 57-63.
- Wilson, L.D., & Meyer, J.R. (1985). *The Snakes of Honduras*. 2nd edition. Milwaukee Public Museum.