

***Polychrus guttuosus* (Squamata: Polychrotidae): First record in Olancho, Honduras**

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Localities.— Honduras, Olancho Department, Dulce Nombre de Culmí Municipality, Reserva del Hombre y Biosfera del Río Plátano (RHBRP), Río Negro micro-basin (15°09'36.0"N; 85°18'36.0"W, WGS84, 1000 m a.s.l.; Fig. 1). Date of observation: November 16, 2022, at 16:08 h. Observers: Marcio Martínez, Jorge F. Vásquez-Romero, Irene Sánchez, and Esmelyn Guzmán. We do not collect the individual however, we deposited the photographs in the Amphibian and Reptile Diversity Research Center, University of Texas at Arlington (UTADC 9887).

The individual of *Polychrus guttuosus* Berthold, 1845 (Fig. 2) presented the following morphometric measurements: Snout-vent length (SVL): 113.3 mm, tail length: 370.0 mm, total body length: 483.3 mm, head length: 28.00 mm, head width: 16.00 mm, gular sac: 21 mm, fourth finger length: 11.00 mm, fourth toe length: 14.00 mm, axilla-elbow length: 20.2 mm, gular scales: 22, vertebral scales: 82, scales around midbody: 61 and femoral pores: 15 on each side, and the following proportions: tail length/SVL: 3.27, head length/SVL: 0.24, head length/head width: 1.75. The measurements and proportions presented here coincide with those detailed for males by Antúnez-Fonseca et al. (2022) y Koch et al. (2011) except for the head length/head width ratio 1.75 versus 1.59.

Comments.— Honduras is the northern limit of *Polychrus guttuosus* in its known distribution, occurring from the east to the northwest of the Atlantic slope, in the departments of Gracias a Dios, Colón, Atlántida and Cortés (Solís et al., 2017; McCranie, 2018; Antúnez-Fonseca et al., 2022). Regarding its elevational distribution, it ranges from 10 to 410 m a.s.l. (Antúnez-Fonseca et al. 2022). Most of the records for this species are found in the protected areas that have yet to be legally declared Parque Nacional Warunta, Reserva Biológica Rus Rus, and the declared protected areas Parque Nacional Pico Bonito (Solís et al., 2017; McCranie, 2018), and Reserva del Hombre y Biosfera del Río Plátano recently reported by Antúnez-Fonseca et al. (2022).

The individual was found through direct observation during a three days and two nights (November 15–17, 2022) field trip in the Río Negro micro-basin for the annual biological monitoring, in the second day, characterized by being partly cloudy. The adult male *P. guttuosus* was seen inactive on the leaves of a native palm tree *Chamaedorea* sp. known in Misquito language as “Sih dusa”, one meter above the ground and about 20 meters away from Río Negro’s riverbank. This site is located within a micro-basin declared in 2005 under the agreement number CH-417-2005, in the buffer zone of

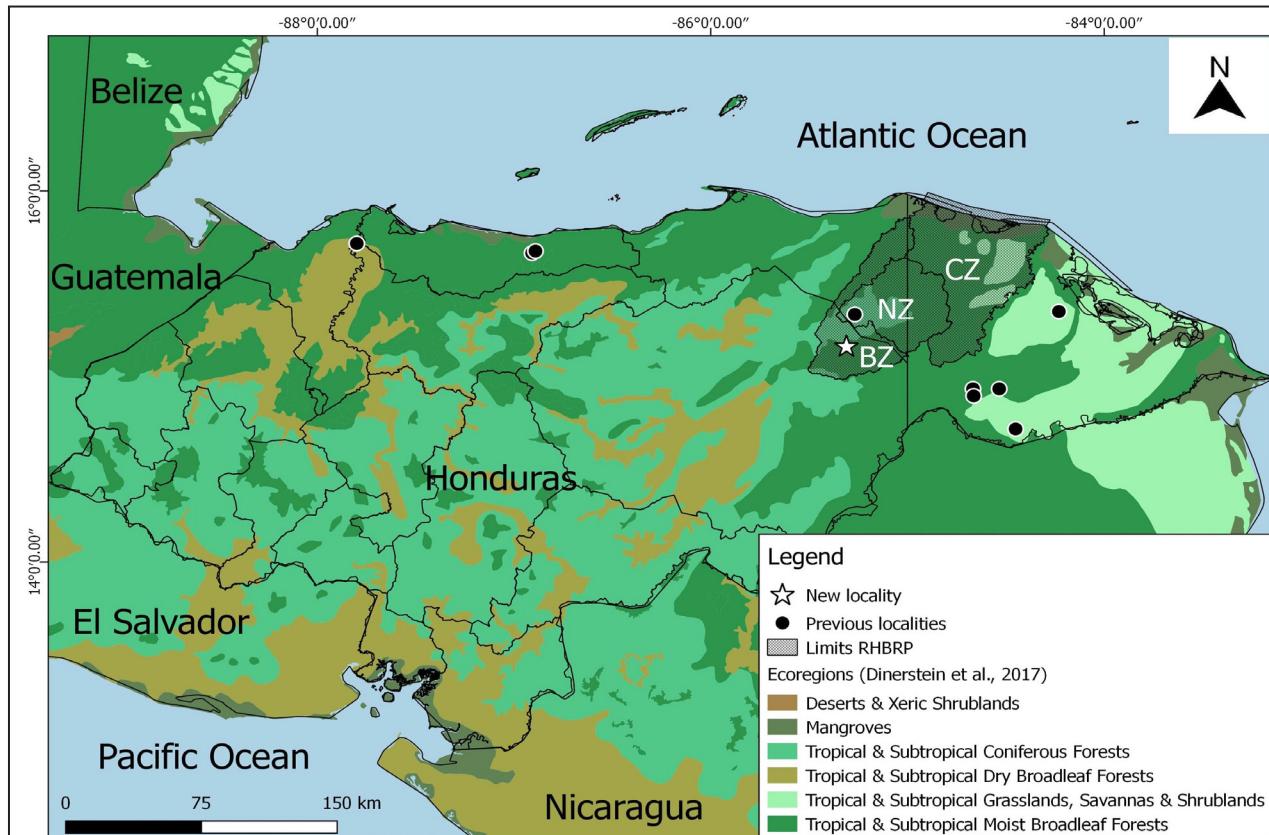


Figure 1. Map of Honduras showing the localities of *Polychrus gutturosus* and the boundaries of the Reserva del Hombre y Biosfera del Río Plátano. The circle represents the previous locality presented by Antúnez-Fonseca *et al.* (2022) and the white star represents the new reported locality. We defined the following acronyms that we labeled in white and referred to the protected area: CZ= Cultural Zone, NZ= Nuclear Zone, and BZ= Buffer Zone.

the Reserva del Hombre y Biosfera del Río Plátano (the only site in Honduras declared by UNESCO -1982- as a Natural World Heritage Site) and is in the highest elevation zone of the protected area in the mountain range known as Punta de Piedra (ESNA-CIFOR, 2013). This micro-basin has an approximate surface of 621 ha of broadleaf forest and currently supplies water for a population of approximately 1000 inhabitants (Martínez, 2021).

Based on our literature review we reported the first record of *Polychrus gutturosus* for the Olancho Department and for the buffer zone of Reserva del Hombre y Biosfera del Río Plátano. This is the second record confirmed for the protected area after the recently published locality for the core zone of this protected area (Antúnez-Fonseca *et al.*, 2022). In addition, our record is the one with the highest elevation for Honduras (1000 m a.s.l.), in relation with the highest elevation previously recorded (410 m a.s.l.) by Solís *et al.* (2017), although the highest known elevation for this species is 1300 m a.s.l. in the Valle del Cauca Department, Colombia (Castro-Herrera

& Vargas-Salinas 2008). Our record fills a gap in the distribution of this species, located approximately 21 km southwest from the closest record published by Antúnez-Fonseca *et al.* (2022).

The protected areas of the Atlantic coast seem to have an important role in maintaining this species, since it still presents certain forest patches where *P. gutturosus* inhabit (e.g., Rodrigues, 2005). Therefore, its crucial to carry out conservation efforts to maintain the quality of these habitats given that there are species, such *P. gutturosus*, that seem to be conditioned to inhabit places with high habitat quality (see Scott *et al.*, 2006; Santos *et al.*, 2008). In the Reserva del Hombre y Biosfera del Río Plátano, the main threat is extensive cattle ranching, an activity that generates the highest level of deforestation in the protected area, threatening the survival of *P. gutturosus* and other species that need forest cover. In addition, we consider that a greater sampling effort within the forest patches along the distribution zones of this species increases the possibilities to encounter more individuals (e.g., Hurlbert, 1971),



Figure 2. Adult male of *Polychrus gutturosus* (UTADC 9887), buffer zone of Reserva del Hombre y Biosfera del Río Plátano, Olancha Department, Honduras.

and therefore fill other information gaps as is the case of the center and west of the Colón Department and the west of the Atlántida Department, where there are no records.

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