



# First Confirmed Record of Boettger's Caecilian, *Siphonops paulensis* Boettger 1892 (Gymnophiona: Siphonopsidae), for the Department of Beni, Bolivia

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Caecilians are limbless, secretive, and fossorial amphibians that are poorly represented in herpetological collections (Taylor 1968; Vitt and Caldwell 2013). Three species, *Caecilia marcusii* Wake 1985, *Siphonops annulatus* (Mikan 1822), and *Siphonops paulensis* Boettger 1892, are known to occur in Bolivia (De la Riva et al. 2000; Köhler 2000; De la Riva and Reichle 2014; Frost 2023), of which *S. annulatus* appears to have the most extensive distribution (De la Riva et al. 2000).

In Bolivia, Boettger's Caecilian (*S. paulensis*) has been reported from the Department of Santa Cruz (Dunn 1942; De la Riva 1990; De la Riva et al. 2000; Köhler 2000; Montero et al. 2005; Embert and Reichle 2008; Miranda et al. 2013). Montero et al. (2005) and Embert and Reichle (2008) listed the species from the Department of Beni without any supporting material; however, De la Riva et al. (2000) and Köhler (2000) noted that *S. paulensis* likely has a wider distribution in Bolivia than has been documented and that it probably occurs in the Department of Beni.

*Siphonops paulensis* is oviparous and exhibits parental care of clutches of 4–6 eggs (Gans 1961; Montero et al. 2005). This species is known to inhabit open environments and riparian forests from humid transitional Amazonian (Buena Vista) and Chiquitano (Piraí River, Santa Cruz de la Sierra City, and the Chiquitania region) forests in the Department of Santa Cruz (Table 1; Dunn 1942; De la Riva et al. 2000; Köhler 2000; Montero et al. 2005; Mott et al. 2016), with one record from the interior of the city, demonstrating the tolerance of the species to anthropogenic situations (De la Riva 1990; De la Riva et al. 2000; Köhler 2000; Montero 2003; Montero et al. 2005). Little is known about the diet of *S. paulensis* and South American caecilians in general (Jared et al. 2018).

At 2021 h on 24 April 2023, we found an adult (unknown sex) *S. paulensis* (Fig. 1) crossing a road in secondary Amazonian forest in Renacer, Municipality of San Javier, Province Cercado, Beni, Bolivia (-14.51502, -64.29651; Fig. 2). The specimen measured 32.3 cm in total length, 25.6 g live weight, and had 104 rings on the body (Taylor 1968 listed 100–118 rings in *S. paulensis*). The coloration, pattern, and meristic data of the specimen are congruent with descriptions by Taylor (1968, 1970) and Vaz-Silva et al. (2020) for *S. paulensis*. The specimen was collected by Luis R. Rivas, Jesus Noe, and Elias Muñoz and deposited in the herpetology collection of the Centro de Investigación de Recursos Acuáticos of the Universidad Autónoma del Beni José Ballivián (CIRAH-1017). The identity of the species was confirmed by Dr. Wilian Vaz-Silva, Centro de Estudios e Pesquisas Biológicas, Goiás, Brasil.



**Figure 1.** An adult Boettger's Caecilian (*Siphonops paulensis*; CIRAH-1017) from Renacer, Municipality of San Javier, Province Cercado, Beni, Bolivia. Photograph by Luis R. Rivas.

**Table 1.** Previous records of Boettger's Caecilian (*Siphonops paulensis*) in the Department of Santa Cruz, Bolivia.

Localities	References
Buena Vista, Ichilo Province (-17,46001, -63,66020)	Dunn 1942
Santa Cruz de la Sierra, Andrés Ibáñez Province (-17,78320, -63,18210)	Dunn 1942; De la Riva 1990; Montero 2003
Calle Ballivián, Santa Cruz de la Sierra, Andrés Ibáñez Province (-17,78480, -63,18231)	Montero et al. 2005
University campus, Santa Cruz de la Sierra, Andrés Ibáñez Province (-17,77791, -63,19130)	Montero et al. 2005
Río Piraí, Santa Cruz de la Sierra, Andrés Ibáñez Province (no coordinates listed)	Montero et al. 2005
Chiquitanía region (no province or coordinates listed)	Embert and Reichle 2008

This record represents the first confirmed report and voucher specimen for the Department of Beni and extends the geographic distribution of the species 333 km (straight line distance) NNW of the closest record (Buena Vista, Santa Cruz) in Bolivia. The Amazonian forest in the area is dominated by Ochoo (*Hura crepitans*), Palo María (*Calophyllum brasiliense*), and uayabochi (*Calophyllum* sp.), all of which are commonly subjected to logging (FAN 2015). The specimen was found in an area characterized by abundant patujuzales (*Heliconia* sp.) and ambaibales (*Cecropia* sp.). The forests surrounding the community where this specimen was collected are under intense pressure from the agro-industry, particularly from the Rio Negro Mennonite Colony. Deforestation in this community and in the surrounding region is occurring at an accelerating rate primarily for agricultural development with

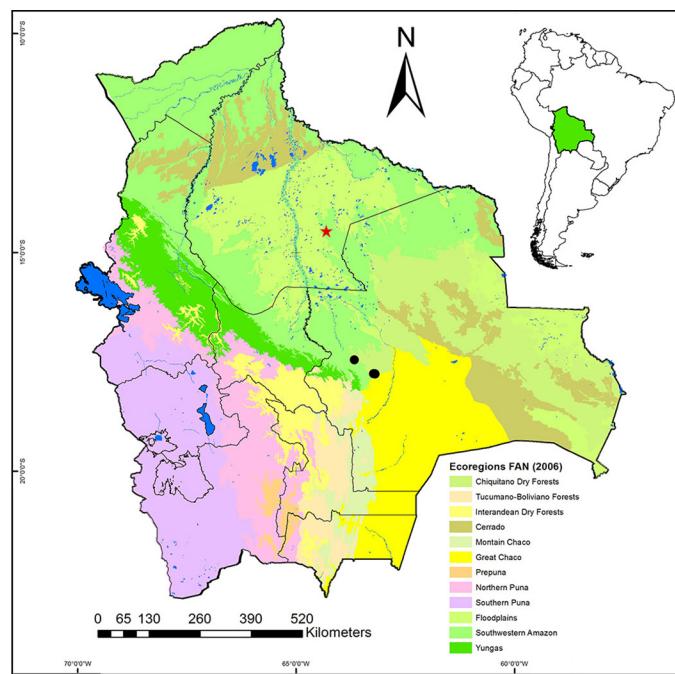
inevitable negative consequences for the soil, water, and biodiversity.

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**Figure 2.** The distribution of Boettger's Caecilian (*Siphonops paulensis*) in Bolivia. Previous records are indicated by black dots and new record from the Department of Beni by the red star.

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