



## A New Locality Record for Vulcan's Slender Caecilian, *Caecilia volcani* (Taylor 1969), on Isla Colón, Bocas del Toro Province, Panamá

Simon E. Harper<sup>1</sup>, Cole Mackay<sup>2</sup>, Peter Lahanas<sup>3</sup>, and Edgardo Griffith<sup>4</sup>

<sup>1</sup>Department of Biological Sciences, Southern Illinois University-Edwardsville, Edwardsville, Illinois 62026, USA (simharp@siue.edu)

<sup>2</sup>University of British Columbia, Vancouver, BC V6T 1Z4, Canada

<sup>3</sup>Institute for Tropical Ecology & Conservation, Bocas del Toro, Panamá

<sup>4</sup>El Valle Amphibian Conservation Center Foundation (EVACC Foundation), El Valle de Antón, Panamá

Vulcan's Slender Caecilian (*Caecilia volcani*) is endemic to Costa Rica and Panamá, where it has been recorded at elevations of 500–1,100 m approximately 200 km from the Continental Divide (Summers 2001). Although the type specimen was collected in the Coclé Province near El Valle de Antón, Panamá, all recent observations of this species have been reported from the provinces of Chiriqui and Bocas del Toro in western Panamá and along the Caribbean versant of Costa Rica in the highlands of Limón (Taylor 1969; Savage and Wake 2001; Kubicki and Arias 2017) (Fig. 1).

On 1 July 2023, we found a caecilian crossing a dirt path near the buttress of a fig tree in a tropical lowland rainforest during a nighttime rain on the western side of Isla Colón near Boca del Drago, Bocas del Toro Province, Panamá (9.40854, -82.31389; elev. 40 m asl). This caecilian (~35 cm SVL) had 145 total grooves, 25 of which were secondary grooves. Eyes were visible and the tentacle was positioned directly below the nostril (Fig. 2). We identified the caecilian as *C. volcani* following the criteria of Savage (2002). Photographic vouchers were deposited in the digital collection of the Amphibian and Reptile Diversity Research Center, University of Texas at Arlington (UTADC 10004). The identity of the species was confirmed by Brian Kubicki of the Costa Rican Amphibian Research Center.



**Figure 1.** Map marking past observations and a new locality for Vulcan's Slender Caecilian (*Caecilia volcani*). Past observations (AmphibiaWeb 2024) are marked by blue circles; the new locality is marked by a red triangle.



**Figure 2.** A Vulcan's Slender Caecilian (*Caecilia volcani*) from Isla Colón, Bocas del Toro Province, Panamá. Photographs by Simon E. Harper.

All previous records of this species have been in montane and premontane wet forests, whereas this new record in tropical lowland rainforest suggests that the species can tolerate a wide range of habitat types and a considerably greater elevational range than previously thought. In addition, this new record is the first account of *C. volcani* on an island.

#### Acknowledgements

We thank Broden Sabados for allowing us to use his GPS device (ArcGIS Field Maps; accessed via Apple iPhone) to record the geospatial data where the caecilian was observed. We also thank friends and colleagues in Panamá for creating a warm environment for learning and conducting research.

#### Literature Cited

- AmphibiaWeb. 2024. *Caecilia volcani* Taylor, 1969. University of California, Berkeley, California, USA. <<https://amphibiaweb.org/species/1875>>.
- Kubicki, B. and E. Arias. 2017. Vulcan's Slender Caecilian, *Caecilia volcani*, in Costa Rica. *Mesoamerican Herpetology* 4: 488–492.
- Savage, J.M. 2002. *The Amphibians and Reptiles of Costa Rica: A Herpetofauna Between Two Continents, Between Two Seas*. The University of Chicago Press, Chicago, Illinois, USA.
- Savage, J.M. and M.H. Wake. 2001. Reevaluation of the status of taxa of Central American caecilians (Amphibia: Gymnophiona), with comments on their origin and evolution. *Copeia* 2001: 52–64. [https://doi.org/10.1643/0045-8511\(2001\)001\[0052:ROTSOT\]2.0.CO;2](https://doi.org/10.1643/0045-8511(2001)001[0052:ROTSOT]2.0.CO;2).
- Summers, A.P. 2001. *Caecilia volcani*. *Catalogue of American Amphibians and Reptiles* 721: 1–2.
- Taylor, E.H. 1969. A new species of Panamánian caecilian. *The University of Kansas Science Bulletin* 48: 315–323.