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Family Scincidae

Range extension of *Mesoscincus managuae* (Dunn, 1933) in Guatemala


The skink genus *Mesoscincus* contains three species that can be differentiated from other skinks in the Americas by their relatively large body size, the presence of three presuboculars, and a median row of dorsal scales that are greatly enlarged posteriorly with respect to the adjacent scales (Taylor, 1935; Griffith et al., 2000). Despite their large size, species of *Mesoscincus* seldom are encountered during fieldwork, resulting in a poor understanding of their distribution and natural history (Griffith et al., 2000; Köhler, 2008).

The three species of *Mesoscincus* are exclusive to Mesoamerica: *M. altamirani* is known from the Balsas Basin and surrounding mountains in the Mexican states of Michoacán and Guerrero (Mendoza-Hernández et al., 2011; Jiménez-Arcos et al., 2016); *M. schwanzei* is known from the Yucatán Peninsula and adjacent Atlantic lowlands in the Mexican states of Campeche, Chiapas, Quintana Roo, Tabasco, and Yucatán, as well as from northern Belize and Petén in Guatemala (Percino-Daniel et al., 2012); *M. managuae* was only known from the tropical dry forests in the Pacific versant of Honduras, Nicaragua, and northern Costa Rica as recently as 1990 (Reeder, 1990), but recent records have demonstrated its presence in El Salvador (Greenbaum et al., 2002) and the valley of the Motagua River in Guatemala (Acevedo, 2006; Ariano-Sánchez et al., 2010). Currently, however, VertNet (2017) does not list any specimens from Guatemala.

On 6 June 2016, one of us (PS) observed an adult individual of *M. managuae* on the outskirts of La Estancia de La Virgen, Municipio de San Cristóbal Acasaguastlán, Departamento de El Progreso, Guatemala (14.9382°N, 89.8853°W; WGS 84; elev. 276 m). The individual was found under a rock in heavily degraded subtropical thorn scrub forest. Specimen collection has been recognized as a best-practice when reporting novel distributional records in Mesoamerica (Clause et al., 2016), but the absence of relevant permits when the individual of *M. managuae* was observed prevented collection. Thus, we deposited a series of four photographs at the photographic collection of the Museo de Zoología, Facultad de Estudios Superiores Zaragoza, Universidad Nacional Autónoma de México (MZFZ IMG 18–21), and uploaded them to the iNaturalist online platform (observations 8366503–8366506). Distinguishing *Mesoscincus* from other genera and discerning between the three species of the genus is relatively straightforward, and the images allowed us to record the diagnostic characters of *M. managuae*: the presence of three presuboculars, an enlarged median row of dorsal scales, a longitudinal scale count between the parietals and the vent approximating 70, short limbs that are broadly separated from each other when adpressed against the body, and a light brown dorsum bearing eight narrow dotted longitudinal dark lines (Fig. 1).

A review of the pertinent literature (i.e., Reeder, 1990; Greenbaum et al., 2002; Savage, 2002; Leenders and Watkins-Colwell, 2004; Acevedo, 2006; Köhler, 2008; Sunyer Mac Lennan, 2009; Ariano-Sánchez et al., 2010; Sánchez Ramos and Orozco, 2011; Valdés Orellana et al., 2011; McCranie et al., 2014) and VertNet (2017) revealed that our voucher represents the first record for the Departamento de El Progreso, the third record for Guatemala, and the northernmost record for the species (Fig. 2). The closest records are those from Rosario and El Arenal, in the Municipio de Cabañas, Departamento de Zacapa, Guatemala, located ca. 11 km and 14 km SE of the new record (in straight line), respectively (Acevedo, 2006; Ariano-Sánchez et al., 2010).



Fig. 1. An individual of *Mesoscincus managuae* (MZFZ IMG 18) from the outskirts of La Estancia de La Virgen, Municipio de San Cristóbal Acasaguastlán, Departamento de El Progreso, Guatemala.  © Pavel Šmek

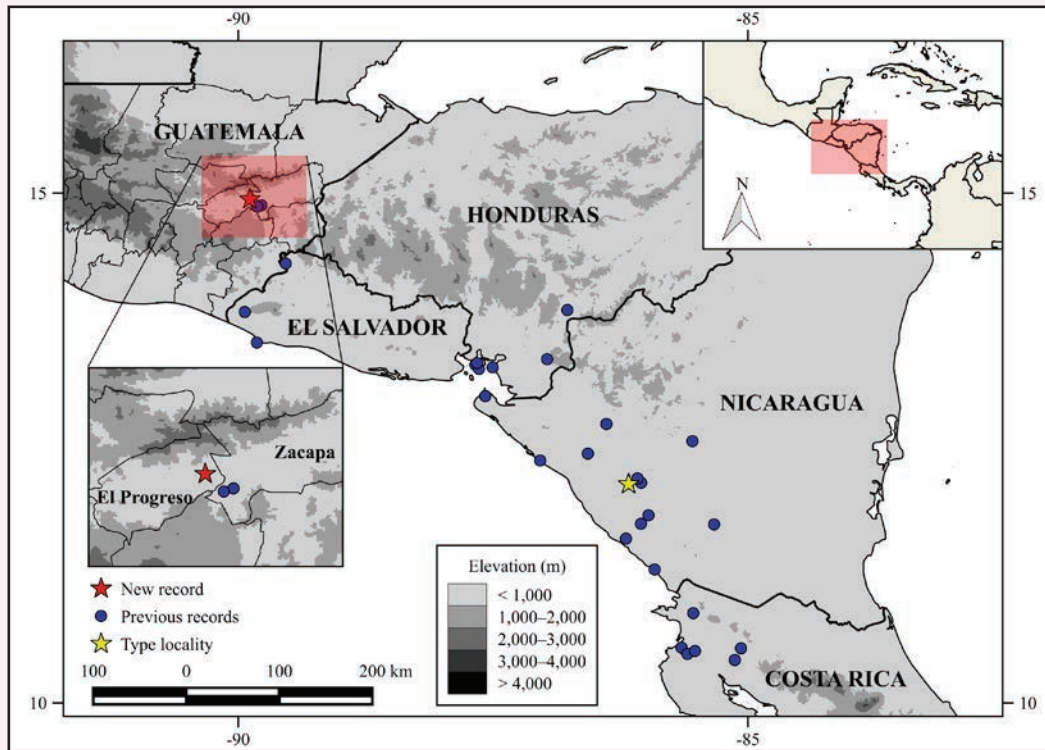


Fig. 2. Known localities for *Mesoscincus managuae*. Bold lines represent country limits and narrow lines Guatemalan departmental limits. The inset on the top-right shows a broad overview of the region.

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***Plestiodon tetragrammus* Baird, 1859.** MEXICO: HIDALGO: Municipio de Pacula, Adjuntas (20.930417°N, -99.268213°W; WGS 84) elev. 1,267; 2 September 2017; Miguel Ángel Flores-Hernández. The lizard was not collected. A photo voucher of this lizard (CH-CIB 102) is deposited in the photographic collection of the Herpetological Collection of the Centro de Investigaciones Biológicas, Universidad Autónoma del Estado de Hidalgo. This voucher represents a new municipality record and the second record from the state, with the closest known locality ca. 30.9 km to the SW (airline distance) at Sabinas, Municipio de Zimapán, Hidalgo (Lemos-Espinal and Dixon, 2016). *Plestiodon tetragrammus* also had not been reported from Parque Nacional Los Mármoles (Cruz-Elizalde et al., 2015), so this species now is known to occur in this natural area. Our record also reconfirms the presence of this species in the state of Hidalgo, as Manríquez-Morán et al. (2017) did not consider this species in a recent list of the non-avian sauropsids of the state.



Fig 1. A *Plestiodon tetragrammus* (CH-CIB 102) from Adjuntas, Municipio de Pacula, Hidalgo, Mexico.

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