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NATURAL HISTORY NOTE

Mexican Spadefoot Toad, *Spea multiplicata*, in an Urban Habitat within Central Mexico

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Spea multiplicata, commonly known as the Mexican Spadefoot Toad, is a small to medium-sized burrowing toad, ranging from the southern United States to southern Mexico (Lemos Espinal and Dixon 2016). The Mexican Spadefoot Toad can be found at various elevations (from near sea level to around 2743 m a.s.l.), and in diverse habitats, including: “desert grassland, shortgrass plains, creosote bush and sagebrush desert, mixed grassland and chaparral, pine-oak woodlands, and open pine forests” (Stebbins 2003).

According to vulnerability established through the Environmental Vulnerability Score (EVS), *S. multiplicata* is classified as a species with low vulnerability (Wilson et al. 2013). Furthermore, in accordance with Mexican law, *S. multiplicata* is not

included in the NOM-059-SEMARNAT-2010, and it is listed as Least Concern by the IUCN Red List.

On 30 August 2024, at 2115, we found two individuals of *S. multiplicata*. The individuals were a male with 51 mm SVL (Fig. 1) and a female with 57 mm SVL. Both individuals were recorded in the city of Metepec (population in 2020: 242,307 inhabitants), Estado de México, which is located in Central Mexico (19° 17' 0.69" N, 99° 34' 19.77" W; 2513 m a.s.l.; Fig. 2). The property is approximately 688.6 m² and is surrounded by houses with an asphalt road (Francisco I. Madero Street). The vegetation was mainly composed of grass, adorned with ornamental shrubs and fruit trees.

Apparently, *S. multiplicata* can inhabit human settlements when sufficient cover is available. Individuals

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Fig. 1. *Spea multiplicata* male observed in an urban habitat in Metepec, Estado de México, Mexico. Photo courtesy of the authors.

of the Mexican Spadefoot Toad have been recorded in other urban locations in the city of Metepec. According to Osnaya Becerril (2017), *S. multiplicata* is tolerant to anthropogenic disturbances and is common in urban areas. Previous studies have found that other anurans in the Estado de México also inhabit urban environments (Gómez-Benitez et al. 2021). These records highlight the ability of some amphibian species to quickly adapt to sudden environmental changes, such as urbanization, which either demands rapid behavioral and ecological responses from the species or significantly affects their population abundance, potentially leading to local extinctions.

Acknowledgments—We thank the López Romero Family for permission to study *Spea multiplicata* on their property in Metepec, Estado de México, Mexico. We thank Edgar de la Rosa-Silva for reviewing a draft of this note.

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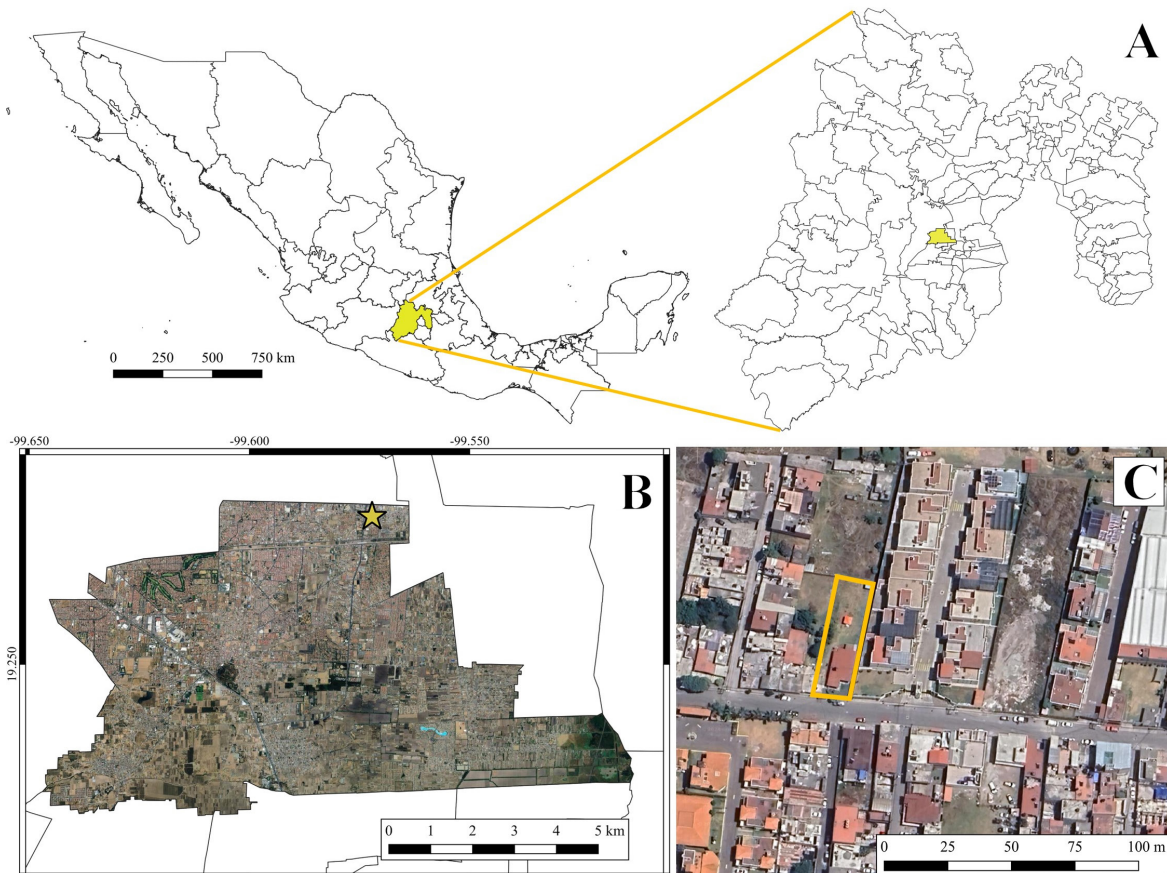


Fig. 2. A) Metepec location within the Estado de México, Mexico. B and C) Satellite images of the urban habitat in which two individuals of *Spea multiplicata* were observed. Both satellite images were obtained from Imágenes © Airbus, Maxar Technologies, © 2024 INEGI.