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Aquatic Escape Behavior in the Mesquite Lizard (*Sceloporus grammicus*)

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Escape behaviors in lizards are of ecological and ethological interest, since the species tend to escape making differential use of terrestrial microhabitats such as crevasses, rocks, trunks, leaf litter, etc. (Leyte-Manrique et al. 2017, Flores et al. 2023). These behaviors allow for a better understanding of the relationship between organisms and their habitat and how they take advantage of available resources.

The genus *Sceloporus* is known to contain mainly saxicolous and arboreal species (Leyte-Marique et al. 2017, Flores et al. 2023); however, they are also known to making use of bodies of water, as they have been recorded to employ this type of environment to perform rare escapes. Immersion, as an example, has been recorded in *Sceloporus clarkii* (Zylstra and Weise 2010) and in *S. torquatus* (Carbajal-Márquez et al. 2014), as well as swimming and floating, recorded in *S. brownorum* (Villalobos-Juárez et al. 2019).

Here we record for the first time the immersion behavior as a type of aquatic escape by the Mesquite Lizard (*Sceloporus grammicus*) which is usually found in terrestrial, saxicolous, and arboreal habitats (Leyte-Manrique et al. 2017).

On 12 July 2023, in “El Cerrillo, Piedras Blancas” Toluca, Estado de México, México, within the Universidad Autónoma del Estado de México’s campus (19.41181°N, -99.70067°W, datum WSG84, 2,605 m. elev., site impacted by anthropic activities, mainly agriculture and cattle raising, with vegetation consisting mainly of grasslands [Gómez-Benitez et al. 2023]), at approximately 1130 h, we were sampling *S. grammicus*. At that time, an adult male (snout-vent length, SVL = 61 mm, tail length = 82 mm, 7 g) was located thermoregulating on a concrete wall. When we approached to capture it, the individual quickly moved to a subsurface agricultural drainage channel (depth 22 cm, with a temperature of 22 °C, Fig. 1A); when we approached closer, the male submerged approximately 7 cm from the surface of the water and held its breath for approximately 2 min while remaining attached to the wall (Fig. 1B). Subsequently, the lizard raised slightly more than half of its head out of the water (Fig. 1C) and then submerged again no more than 2 cm from the surface (Fig. 1D). This second time it did not last more than a minute submerged. Finally, the lizard was captured for data collection, the body temperature after removing it from the water was 23 °C.

To our knowledge, this is the first record of aquatic escape immersion behavior in *S. grammicus* and the third record for the genus after *S. clarkii* and *S. torquatus*. Although the body temperature of the individual does not appear to differ from that of the aquatic environment, experimental studies with a larger number of individuals will help us better understand the behavior reported here and the physiological consequences (if any) since, to the best of our knowledge, species of the genus *Sceloporus* lack the morphology and physiology necessary to exploit aquatic environments.

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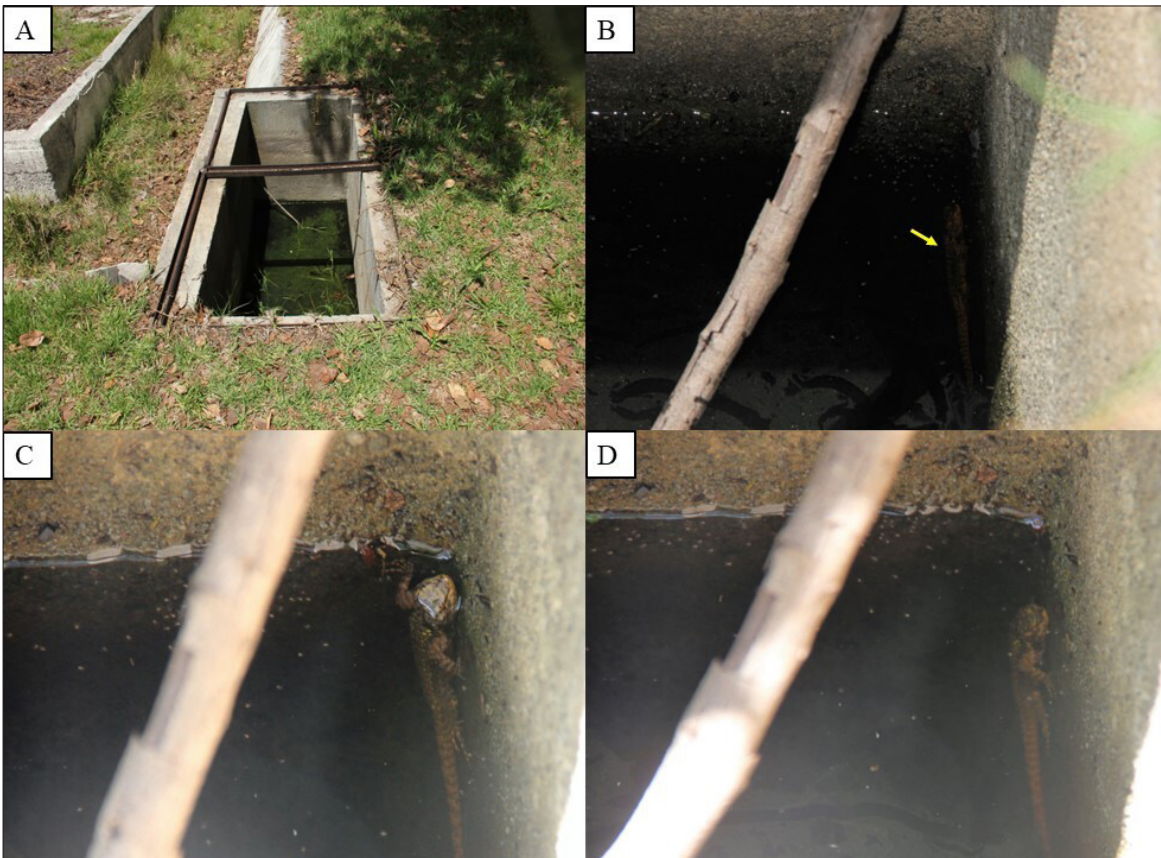


Fig. 1. Photographic documentation of aquatic behavior of *Sceloporus grammicus* in “El Cerrillo, Piedras Blancas” Toluca, Estado de México, México is shown. **A)** subsurface agricultural drainage channel in which the individual submerged; **B)** first immersion of the individual (an arrow points to the lizard); **C)** individual coming out of the water; and **D)** second immersion.

NATURAL HISTORY NOTE

Prairie Lizard (*Sceloporus consobrinus*): Habitat Utilization, Survival of Flooding, and Cryptic Presence at Sites in the Eastern Part of the Range

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We have studied, either together or separately, the Prairie Lizard (*Sceloporus consobrinus*) in many parts of its vast geographic range west of the Mississippi River in habitats as distantly separated as the forested regions in Arkansas and Louisiana, the foothills of the Rocky Mountains in Colorado, the plains in Colorado and New Mexico, and in between in many parts of Oklahoma and Texas. Within these areas *S. consobrinus* (*sensu* Leaché and Reeder 2002) is often one of the most frequently observed reptiles in a wide variety of habitats. However, we offer the present observations to help in understanding the wide geographic distribution of Prairie Lizard with emphases on its versatile microhabitat utilization and cryptic presence

in some human dominated habitats as observed in the forest lands of extreme northwestern Arkansas. On Thursday 18 April 2022 at ca. 1645 h (air temperature ca. 61° F) as JMW walked along the lower edge of riprap ca. 5 m from the southern shoreline (on that date) of part of Little Hickory Creek Cove, Beaver Lake, Hickory Creek Park, Benton County, Arkansas (ca. 36.237653°N, 94.038055°W, datum WGS84, elev. ca. 342 m), the presence of *S. consobrinus* was first observed in the park by the aforementioned after thousands of visits to it since August 1965. On that occasion he was startled by the rapid movement of a retreating animal at the base of the roadside-lakeside riprap. Careful searches along the base of the jumble