



An Update on the Surinam Toad (Pipa pipa) (Linnaeus 1758) in Trinidad, West Indies

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The anuran family Pipidae, one of the most primitive groups of frogs, is distributed throughout the equatorial regions of America and Africa (Trueb and Cannatella 1986; Duellman and Trueb 1994; Frost et al. 2006; Alves-Pinto et al. 2014). The Surinam Toad (Pipa pipa) is endemic to the Amazonian Basin and has been recorded on the island of Trinidad (Kenny 1969; Alves-Pinto et al. 2014). They can grow to 200 mm SVL, are entirely aquatic, and vocalization consists of a loud click (Kenny 1969; Cannatella and Trueb 1988; Duellman and Trueb 1994). The diet of this species consists of fish, crustaceans, and other anurans (Deckert 1917; Duellman 1978). During amplexus, eggs are placed on the soft dorsal skin of the female and pressed into the skin by the male, so that each egg is in its own little pouch of skin where they develop from tadpoles into fully metamorphosed juveniles (Kugler 1961; Trueb and Cannatella 1986).

On Trinidad, the Surinam Toad has been recorded from central and southwestern regions, with the first authoritative record from Barrackpore, southwestern Trinidad in 1953 (Kugler 1961; Kenny 1969). Additional, unpublished field notes recorded a 'pregnant' female in July 1983, which later produced around 40 babies, in Cedros (southwestern Trinidad), and two adults taken by fishermen in Nariva Swamp (east central Trinidad) in September 1995 (J.R. Downie, pers. comm.). The last published documentation of the Surinam Toad in Trinidad was by Murphy (1997), which was based on targeted amphibian surveys during the late 1980s and early 1990s. As far as we are aware, no additional documented populations or sightings have been reported since.

Herein we present the first authoritative record in more than two decades that reconfirms the presence of Surinam Toad populations on Trinidad. Around 0000 h on 11 June 2023, we captured four Pipa pipa in a small stream in Granville, southwestern Trinidad (10.13206 N, -61.75498 W) (Fig. 1). Two adult females with eggs on their backs measured 12-14 cm SVL (Fig. 2). Two males measured 7-10 cm SVL (Fig. 2). All were handled adhering to ethical and biosecurity protocols (sanitary nets and handling media and use of ambient stream water to temporarily hold the frogs). All were released at the site where they were found shortly after being measured and photographed.

We had previously surveyed four additional streams, all representing ideal habitat (slow-moving black water in interior forest; Duellman and Trueb 1994) within 20 km of this location.

On 19 June 2023, we conducted a second survey at the same location and observed 30 individuals between 1900 and 2300 h along an approximately 0.15-km stretch of the stream. The discovery of this population in southwestern Trinidad may not be surprising, because the first documented populations were also in the general area (Kenny 1969). Due to the secretive nature of this species, additional undocumented populations likely are present in undisturbed interior forest streams in southern and eastern parts of Trinidad. We recommend further surveys to update the distribution of this species on Trinidad and to facilitate management of threats (mainly habitat degradation and pollution).



Figure 1. An adult Surinam Toad (Pipa pipa) from Granville, southwestern Trinidad. Photograph by Zakariyya Ali.



Figure 2. An adult female (left) and an adult male Surinam Toad (Pipa pipa) (right) from Granville, southwestern Trinidad. Photographs by Zakariyya Ali.

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