



Scientific note

**Predation of *Boana faber* (Anura, Hylidae) upon
Dendropsophus minutus (Anura, Hylidae)**

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The Blacksmith Tree Frog *Boana faber* (Wied-Neuwied, 1821) is a large-sized species that inhabits water bodies in forested and open environments in the Atlantic Forest, from northeastern Argentina to eastern Brazil (Faivovich *et al.* 2005; Haddad *et al.* 2013). The vocalization of this species resembles the hammering of a blacksmith and males have a prepollex with a spine resembling a thumb, which is used in combat with other males. The *Boana faber* reproduction involves mud nests constructed by males at the edges of bodies of water (Martins, 1993; Maffei & Ubaid, 2014). Despite some aspects of its biology are well known, like his breeding behavior (Martins, 1993) and movement (Oliveira *et al.* 2016). Observations on its trophic ecology remain scarce, with some information about attempted predation (Rocha-Lima *et al.* 2018) and diet (Table 1). In this contribution we report a predation event by *Boana faber* on November 3rd, 2021, at approximately 8:00 p.m, in Serra do Brigadeiro, municipality of Ervália, state of Minas Gerais, Brazil (-20.86661° S, -42.52393° W, datum WGS84; 1,091 m a.s.l [above sea level]). On the ground, on the shores of a small water body, we found a male of *B. faber* (ZUFMS-

AMP16860) preying upon a *Dendropsophus minutus* (Peters, 1872) (ZUFMS-AMP16859) at the edge of a pond (Figure 1). Both individuals were collected (under collection permit SISBIO #45889) and deposited in the Zoological Collection from Universidade Federal do Mato Grosso do Sul (ZUFMS-AMP).

In addition, aiming to search for records of batracophagy by *B. faber*, we conducted on May 9th, 2022 a literature review using the Google Scholar database, employing the following terms: *dieta* OR *diet* AND "*Boana faber*" OR "*Hyla faber*" OR "*Hypsiboas faber*". We found 495 results, of which only four were relevant to this study as they presented batracophagy records by *B. faber*. Additionally, we searched in all editions of the journal *Herpetological Review* (1967–2022), which traditionally publishes natural history notes, many of which are not yet traceable by Google Scholar. In this journal, we found three records useful to this work, none of which were available on Google Scholar. Therefore, we found a total of nine species preyed upon by *B. faber*, including even a record of cannibalism (Table 1). Once *Dendropsophus minutus*

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and *Boana faber* are often found syntopically (e.g., Moura *et al.* 2012; Santana *et al.*, 2010), this interaction might be more frequent along the species distribution. Besides, the Eltonian shortfall refers to

a lack of understanding of the ecological interactions between species within an ecosystem, the present record increases our knowledge about the trophic ecology of the smith-frog and its prey.

Table 1. List of amphibians recorded as prey of *Boana faber*.

Preys	Sources
<i>Aplastodiscus perviridis</i> (Lutz, 1950)	Solé <i>et al.</i> (2004)
<i>Scinax granulatus</i> (Peters, 1871)	Solé <i>et al.</i> (2004)
<i>Haddadus binotatus</i> (Spix, 1824)	Leite <i>et al.</i> (2008)
<i>Scinax</i> aff. <i>perereca</i>	Moura & Feio (2010)
<i>Dendropsophus meridianus</i> (Lutz, 1954)	Figueiredo-de-Andrade <i>et al.</i> (2012)
<i>Boana faber</i>	Maffei <i>et al.</i> (2014)
<i>Boana semilineata</i> (Spix, 1824)	Braun <i>et al.</i> (2017)
<i>Boana pardalis</i> (Spix, 1824)	Braun <i>et al.</i> (2017)
<i>Dendropsophus minutus</i>	Present work



Figure 1. Sequence of photos of the *Dendropsophus minutus* being pulled out after it was preyed upon by the *Boana faber*, on November 3rd, 2021 in the Serra do Brigadeiro, municipality of Ervália, Minas Gerais, Brazil.

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