

## ***Hypsiboas faber* (Amphibia, Anura, Hylidae) as prey of the Barred forest falcon, *Micrastur ruficollis* (Aves, Falconiformes, Falconidae), in an Atlantic Forest area of southeast Brazil.**

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Anuran amphibians are relatively small-bodied animals that can be locally abundant, and often present gregarious behavior during the reproductive period. Those characteristics make them potential prey for many types of vertebrates and some invertebrates (Toledo, 2005; Pombal Jr., 2007; Toledo, Ribeiro and Haddad, 2007). In a review of records of vertebrate predators of anurans, Toledo, Ribeiro and Haddad (2007) found that, after snakes and mammals, birds were the third most representative group of anuran predators, comprising between 10% and 20% of published reports.

The Smith frog, *Hypsiboas faber* (Wied-Neuwied, 1821), is a large-bodied hylid frog (up to ca. 100 mm SVL) with a wide distribution along the Atlantic Forest biome, ranging from northeastern Brazil south to Argentina and Paraguay (Frost, 2013). It is a habitat-generalist species, being found in the interior and edges of forests, as well as in open areas, usually associated to lentic water bodies (Bertoluci and Rodrigues, 2002). There are a number of published records of predation on post-metamorphic *H. faber* by vertebrate predators, particularly snakes and large frogs (Martins, Sazima and Egler, 1993; Souza, Ribeiro and Silva Jr., 2003; Pombal

Jr., 2007; Toledo, Ribeiro and Haddad, 2007; Hartmann, Hartmann and Martins, 2009; Silva et al., 2009; Silva, Ribeiro-Filho and Feio, 2011; Forti and Bertoluci, 2012). However, we are not aware of any reports of predation on this frog species by birds (see review in Toledo, Ribeiro and Haddad, 2007). Martins, Sazima and Egler (1993) reported an unsuccessful predation attempt by a Barn owl, *Tyto alba* (Scopoli, 1769), on a calling male *H. faber*. In the present note we report a case of predation attempt on a specimen of *H. faber* by a Barred forest falcon, *Micrastur ruficollis* (Vieillot, 1817), in an Atlantic Forest area of southeastern Brazil. The observation was made during an inventory of bats at the Reserva Ecológica de Guapiaçu (22°24' S, 42°44' W), a forest reserve located in the municipality of Cachoeiras de Macacu, state of Rio de Janeiro, southeastern Brazil.

On 17 October 2011, at 06:10 h, a Barred forest falcon was found entangled in a mist net set close to a pond near a trail in the forest, at ca. 400 m elevation. The bird was holding an adult *H. faber* in the claws of its right foot. As the people who were checking the nets approached, the falcon released the anuran, which tried to escape but got entangled in the mesh of the net (Fig. 1). Both falcon and frog were released from the net by the observers and set free. Measurements were not taken for either the bird or the frog, but both were clearly full-grown. Adult *H. faber* attain up to 60g in body mass (Araujo et al., 2009) and adult *M. ruficollis* average 168g (males) or 233g (females) (Thorstrom, 2000). Thus, in this case the prey must have been about one-quarter to one-third the size of the predator, which indicates that *M. ruficollis* can capture and carry away relatively large prey (see Thorstrom, 2000). Indeed, this raptor is known to occasionally take prey even heavier than itself, though in such cases it may be unable to carry them away (Röhe and Antunes, 2008).

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**Figure 1.** A Barred forest falcon (*Micrastur ruficollis*) entangled in a mist net with its just-released prey, an adult Smith frog (*Hypsiboas faber*). Photo by Roberto Leonan Morim Novaes.

There are few previous reports of anuran predation by *M. ruficollis*. Röhe and Antunes (2008) mention predation on a Yellow cururu toad, *Rhinella icterica* (Spix, 1824), by one individual of *M. ruficollis* in an Atlantic Forest area in the state of São Paulo, southeastern Brazil. Thorstrom (2000) cites predation by *M. ruficollis* on unidentified anurans in a tropical forest site in Guatemala. The latter author suggests that anuran prey may comprise a very small portion of the diet of *M. ruficollis*, which tends to prey mainly on reptiles and smaller birds. Thus, the present record of predation on *H. faber* by the Barred forest falcon

apparently represents an occasional occurrence, as well as the first confirmed record of avian predation on that frog species.

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