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First record of mammal consumption by *Erythrolamprus miliaris*. How wide is the diet of this water snake?

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The Xenodontini tribe (*sensu* Grazziotin et al., 2012), which currently comprises three genera (*Lygophis*, *Xenodon,* and *Erythrolamprus*), shows a great diversity of food habits. Some Xenodontini snakes, such as the ophiophagus *Erythrolamprus aesculapii*, are highly specialized, whereas others, such as *Erythrolamprus miliaris*, are considered generalists (Sazima and Abe, 1991; Marques and Puorto, 1994).

Erythrolamprus miliaris is widely distributed in South America (Dixon, 1989). Five subspecies are recognized, which are morphologically and geographically differentiated (Dixon, 1989). This snake is a habitat specialist, typically foraging in and around bodies of water, but a dietary generalist (*e.g.,* Michaud and Dixon, 1989; Marques and Sazima, 2004; Hartmann et al., 2009). The water snake *E. miliaris* preys primarily on frogs, but also includes other aquatic prey in its diet such as fishes, caecilians (*e.g., Chthonerpeton*) and tadpoles (Marques and Souza, 1992; Palmuti et al., 2009; Vrcibradic et al., 2012). Terrestrial prey (*e.g.,* lizards or Lepidoptera larvae) are also occasionally eaten (Araújo, 1985; Machado and Morato, 1998; Carreira Vidal, 2002), but endothermic prey have not previously been recorded. Here we report the first instance of a mammalian prey item for *E. miliaris*. We collected a recently dead female *E. miliaris* (SVL 581 mm, TL 120 mm) (Figure 1A) on September 10, 2017, in an area of disturbed Atlantic forest on the banks of the Iconha River, municipality of Iconha, state of Espirito Santo, Brazil (-20.776667°S, -40.827778°W) (T. Marcial, pers. com.). The voucher specimen is housed in the herpetological collection of Museu de Biologia Prof. Mello Leitão (MBML 4167). During dissection of the specimen, we found a partially digested rodent (head, neck and forelimbs missing) of the species *Oligoryzomys nigripes* (Rodentia, Cricetidae, Sigmodontinae), that had been swallowed headfirst.

The rodent remains (mass = 12.4 g) included the middle and posterior part of its body (totally covered with hair), including both hind feet and the tail (which were covered with scales and hair) (Figure 1B). It was identified by comparisons with rodent specimens from Atlantic Forest localities housed in the Museu de Biodiversidade do Cerrado da Universidade Federal de Uberlândia and from description in the literature (Emmons and Feer, 1997; Eisenberg and Redford, 1999). Identification was based on the light brown dorsum, lightly bicolored tail (longer than 80mm) and narrow hind feet (23 mm long). A sample of dorsal body hairs was collected, cleaned, and then mounted on a glass slide with 70% ethanol solution. We observed it using an optical microscope at 400x magnification to analyse the medullar pattern. Examination of guard hairs revealed continuous, multiseriate medulla with anastomosed cells in the form of stripes, as described for *O. nigripes* by Martin et al. (2009). This scansorial rodent mainly uses forest fragments with lower canopy and denser understory vegetation and border areas between forests and open areas, being frequently associated with disturbed sites within remnants of secondary Atlantic Forest (Püttker et al., 2008; Machado et al., 2011).

Consumption of mammalian prey is unusual for the Xenodontini tribe, having previously been recorded only twice for *E. poecilogyrus semilineatus*, in southern Brazil (Corrêa et al., 2016) and in Uruguay (Carreira Vidal, 2002) and once for *Lygophis lineatus* (Michaud

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Figure 1. Female of *E. miliaris* and its mammal prey, found in the stomach tract. (A) Female of *E. miliaris*, (B) prey detail, and (C/D) detail of the injuries on the snake body. **Photos by:** Natália F. Torello-Viera.

and Dixon, 1989). Xenodontini snakes swallow and eat live prey (Greene, 1997). The consumption of prey that are potentially dangerous, such as rodents, is unexpected and has the potential to cause injuries to this group of snakes that do not constrict or envenom their prey (Andrade and Silvano, 1996).

The specimen of *E. miliaris* examined here showed skin injuries (Figure 1C), which could have been caused by the rodent it consumed. However, the rodent could also have already been dead when the snake encountered and consumed it, given that necrophagy has been reported for *E. miliaris* (Sazima and Strüssmann, 1990; Gomes et al., 2017). No necrophagous insect larvae were found in the snake´s gut, but the gut contents were already semi-digested, and any larvae present could have been completely digested. The question of whether this non-constricting, aglyphous snake can feed opportunistically on such potentially dangerous prey as live rodents remains open.

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