

this litter size is larger than previously reported (range = 4–26, mean = 14; Ernst and Ernst 2003. Snakes of the United States and Canada. Smithsonian Inst. Press, Washington, DC. 668 pp.). Litter sizes are possibly larger at this human-modified fish hatchery site compared to more natural sites, due to artificially dense prey base (native and nonnative fishes, native *Anaxyrus woodhousii*, and nonnative *Lithobates catesbeianus* and *Ambystoma mavortium nebulosum*).

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**THAMNOPHIS RADIX (Plains Gartersnake). DEFENSIVE BEHAVIOR: TONIC IMMOBILITY.** Tonic immobility is an anti-predator behavior that works under the assumption that a predator will treat an immobile prey item differently than one that is actively trying to escape. Differential treatment can occur because the prey item has become more cryptic, or because immobility reflects death, decreasing the predator's attack response. Tonic immobility is often equated to thanatosis, or death feigning, but death feigning employs more dramatic and elaborate displays (e.g., mouth gaping, supination; Gregory and Gregory 2006. *J. Comp. Psychol.* 120:262–268). Death feigning and tonic immobility have been well described in *Heterodon* (e.g., Burghardt and Greene 1988. *Anim. Behav.* 36:1842–1844) and *Natrix* (e.g., Gregory et al. 2007. *J. Comp. Psych.* 121:123–129), but these behaviors appear to be more widespread than previously thought. Here, we report the first account of tonic immobility in *Thamnophis radix*.

At 1700 h on 16 June 2011, we encountered an adult female *T. radix* in a grassy field 15 km W of Morris, Minnesota, USA (45.62637°N, 96.05555°W; datum: WGS 84). The snake was moving when first sighted, and was pursued for several minutes before capture. While attempting to capture the snake we repeatedly blocked its escape with a net. It was at this point that the snake stopped, writhed in place for several seconds, and then



FIG. 1. Immobile *Thamnophis radix* showing position of head and tail, next to regurgitated earthworm.

became completely still. It remained motionless and regurgitated an earthworm as we handled it to determine sex and reproductive state. Unlike the limpness observed in some species that feign death, this snake was tense and retained its muscle tone both during and after handling. We placed the snake in the grass next to the regurgitated worm. The head of the snake was slightly bent and barely tucked under the body, while the tail was coiled, exposing the underside (Fig. 1). It held this position even when gently nudged and remained immobile for at least several minutes, as long as we could see it as we were walking away. Our observation suggests that *T. radix* are capable of tonic immobility, as has been reported in *T. elegans* and *T. sirtalis* (Gregory and Gregory 2006, *op. cit.*). Tonic immobility and other death feigning behaviors may be more common in colubrid snakes than previously suspected.

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**XENOCHROPHIS PISCATOR (Checkered Keelback). DIET AND FORAGING BEHAVIOR.** *Xenochrophis piscator* inhabits wetlands and paddy fields across South and Southeast Asia and is known to prey on frogs, fish, tadpoles, and occasionally rodents and birds (Whitaker and Captain. 2004. *The Snakes of India*. Draco Books, India. 481 pp.) A study conducted at a large lake in Cambodia found that fish comprised 77% of the diet of *X. piscator* (Brooks et al. 2009. *Copeia* 2009:7–20). Here, we report observations of *X. piscator* feeding three anuran species, *Fejervarya* sp., *Duttaphrynus melanostictus*, and *Hoplobatrachus tigerinus* from a village located just outside of Lawachara National Park, Bangladesh (24.330963°N, 91.801120°E; datum WGS84).

At 1200 h on 28 August 2011, we observed a *X. piscator* (male; SVL = 435 mm, tail length = 199 mm) in a paddy field on the side of a road. After capturing the snake, it regurgitated a live adult *Fejervarya* sp. (SVL = 40 mm) that had been swallowed leg first. At 1330 h on 8 September 2011, a loud calling sound attracted our attention to shrub on the side of a paddy field. Upon closer examination, we observed a *X. piscator* (male; SVL = 560 mm; tail length = 232 mm) preying upon an adult *H. tigerinus* (SVL = 73 mm). The snake was swallowing the frog leg first but released the prey when disturbed by our presence. At 2100 h on 15 September 2011, we captured an *X. piscator* (female; SVL = 910 mm; tail length = 335 mm) on the side of a pond. We examined the snake's stomach contents by forced regurgitation and found two adult *D. melanostictus* (SVL = 64 mm and 70 mm). Both of the toads were swallowed leg first.

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