

**EUTRACHELOPHIS BASSLERI. COLORATION AND PHOTOGRAPHS IN LIFE.** *Eutrachelophis bassleri* is a recently described species of a new genus belonging to the family Dipsadidae. Currently, *Eutrachelophis* contains three species—*E. bassleri*, *E. steinbachi*, and an undescribed species—known from the lowland rainforest in western Amazonia (Myers and McDowell 2014. Bull. Am. Mus. Nat. Hist. 385:1–112). Color in life of *E. bassleri* is only known from field notes (Dixon and Soini 1977. The Reptiles of the Upper Amazon Basin, Iquitos Region, Peru II. Crocodilians, Turtles and Snakes. Milwaukee Public Museum, Wisconsin. 154 pp.) that were used in Myers and McDowell (*op. cit.*). Here, we publish the first color photograph of a living specimen, an adult male deposited in the herpetological collection of Centro de Ornitología y Biodiversidad (CORBIDI 09224) from the Chambirillo check point at Cordillera Azul National Park (7.069139°S, 76.015333°W, WGS 84; elev. 1122 m), Picota Province, San Martín Department, Peru, collected on 6 May 2011 by P. J. Venegas.

As can be observed in the photographs (Fig. 1), the specimen has a head that is brown dorsally, rostral scale pale brown, loreal region brown, and labial scales white. A triangular postocular white marking forming a ventrolateral stripe connected with the lateral side of neck collar and nape bearing two conspicuous white ocellar markings. Dorsal surface of neck dark brown, from posterior edge of parietals to a thin incomplete white neck collar;

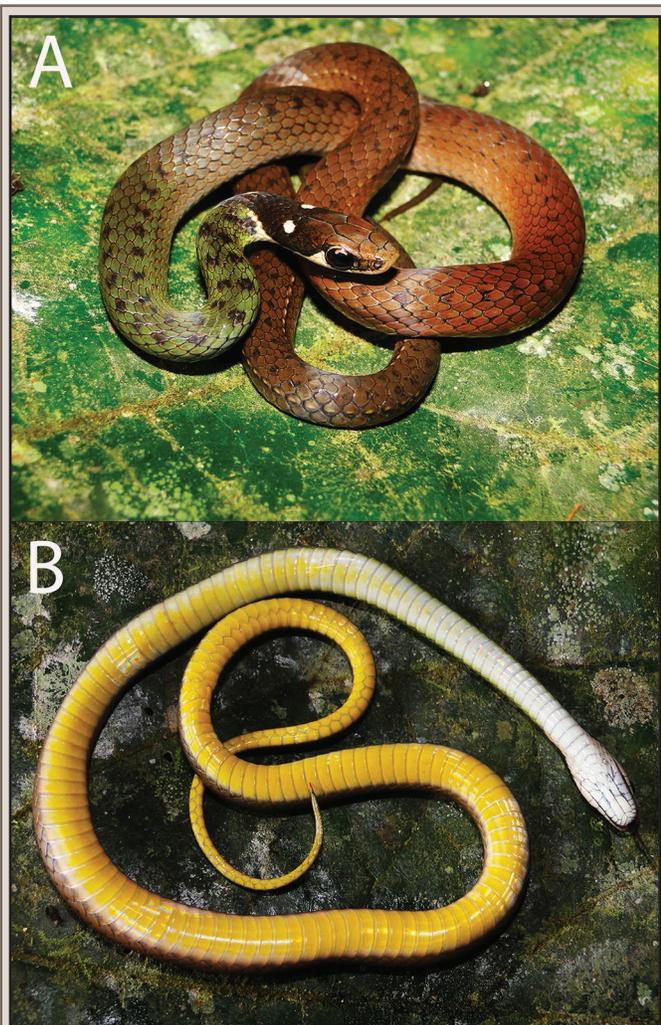


FIG. 1. Dorsolateral and ventral views of *Eutrachelophis bassleri* (CORBIDI 09924), collected at Cordillera Azul National Park, Peru.

first quarter of the body dark green changing to brown up to the tail; dorsolateral lines of dark spots, conspicuous on first quarter of the body becoming vague and disappearing at the tail; and pale dorsolateral flecks from midbody to the tail. Ventral surfaces white becoming yellow from first third of the body to the tail. Iris dark brown with coppery brown coloration on upper region.

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**FARANCIA ABACURA (Red-bellied Mudsnake). FEEDING BEHAVIOR.** *Farancia abacura* are semi-aquatic colubrid snakes found in the southeastern United States (Ernst and Ernst 2003. Snakes of the United States and Canada. Smithsonian Books, Washington D.C. 668 pp.). Although their diet can consist of frogs and salamanders, *F. abacura* are typically thought to specialize on elongate aquatic salamanders, *Amphiuma* and *Siren* (Guidry 1953. Herpetologica 9:49–56; Gibbons and Semlitsch 1991. Guide to the Reptiles and Amphibians of the Savannah River Site. University of Georgia Press, Athens, Georgia. 131 pp.). Consequently, a feeding event may involve subduing and swallowing prey items that can equal or exceed the snake's body length. Because a prey item equal to the total length of the snake will be approximately 50% longer than the distance from the snake's snout to the end of its stomach (Jackson et al. 2004. Zoology 107:191–200), relatively long prey pose challenges to ingestion and prey storage during digestion. Here we report two observations of feeding behavior that shed light on mechanisms by which *F. abacura* may overcome these challenges.

On the 15 March 2008 at approximately 1330 h, two *F. abacura* were found struggling with an *Amphiuma tridactylum* (Three-toed Amphiuma) at the surface of a large ephemeral pool (ca. 0.5 m deep) at Lake Martin, St. Martin Parish, Louisiana, USA. One snake was biting the amphiuma by the snout while the other snake was biting the tail. While attempting to move the snakes and amphiuma to higher ground for observation, the snake at the tail end of the amphiuma released its hold and escaped. The other snake continued to feed and the event was observed for approximately 2 h in the field before the snake was collected and returned to the lab. The primary mode of prey ingestion appeared to be pterygoid walks with conspicuous lateral movements of the snake's head. Some concertina-like compression and extension of the snake's vertebral column was also observed. When ingestion of the prey item was nearly complete, the Mud Snake regurgitated a significant portion of the meal and immediately began consuming it again. We presume this was to "adjust" the prey, rather than a response to disturbance.

Following the feeding event, the snake (SVL = 675 mm; head width = 14.5 mm) was measured and size of the *A. tridactylum* (total length = 494 mm; diameter = 26.2 mm) was estimated from photographs, yielding an estimated body length ratio of 73% and an ingestion ratio of 180.4% (Greene 1983. Am. Zool. 23:431–441; Jackson et al., *op. cit.*). The following day the snake was x-rayed

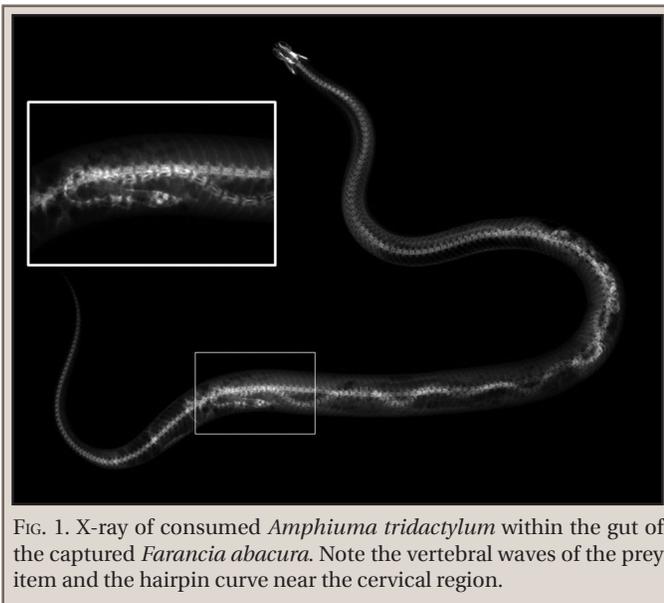


FIG. 1. X-ray of consumed *Amphiuma tridactylum* within the gut of the captured *Farancia abacura*. Note the vertebral waves of the prey item and the hairpin curve near the cervical region.

to examine the orientation of the prey item by Dr. Duane Griggs, DVM, at the Bertrand Drive Animal Hospital in Lafayette, Louisiana. The vertebral column of the amphiuma was compressed into both lateral and horizontal waves with a small hairpin curve in the cervical region (Fig. 1).

On 10 July 2014 at approximately 1000 h, an *F. abacura* (female; SVL = 775 mm; mass = 160.13 g) was captured in a plastic minnow trap set in a floodplain wetland on the U.S. Department of Energy's Savannah River Site, Barnwell Co., South Carolina, USA. At the time of capture, the snake was in the process of swallowing an *Amphiuma means* (Two-toed Amphiuma; SVL = 270 mm; mass = 37.27 g) tail-first. As the *F. abacura* continued swallowing the *A. means* past mid-body, the salamander attempted to bite in defense, but within minutes was completely consumed. Following consumption, the snake was removed from the trap and returned to the laboratory. Approximately 2 h later the snake was processed, which included forcing regurgitation of the prey item. However, regurgitation revealed two surprising results: 1) the *A. means* was still alive, active, and in good body condition; 2) the position of the salamander was now oriented head-first within the snake (i.e., the tail was regurgitated first). Evidently, the position of the *A. means* had completely reversed within the snake's stomach following consumption. It is unclear whether the *A. means* independently changed positions within the snake's stomach or if it was actively manipulated by the *F. abacura* in order to conserve space or facilitate digestion. Nonetheless, folding and compressions of the vertebral column may alleviate some constraints on consuming such long slender prey.

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**FARANCIA ABACURA ABACURA (Red-bellied Mudsucker). REPRODUCTION / COURTSHIP.** Due to the secretive nature of snakes in the genus *Farancia*, reproductive behavior is rarely observed in the wild and courtship behavior has not been reported (Ernst and Ernst 2003. Snakes of the United States and Canada.



FIG. 1. Courtship of *Farancia abacura* in North Carolina, USA. A) Male biting the female mid-body and twisting to the point that he was upside-down. B) Unidentified bulges that were present on the male, just anterior to the vent.

Smithsonian Press, Washington, D.C. 668 pp.). On 15 June 2013, at 1420 h, I discovered a pair of *Farancia a. abacura* ~2 m off of the New Holland Trail at Mattamuskeet National Wildlife Refuge, Hyde Co., North Carolina, USA. The pair was found in a dry section of Bald Cypress forest approximately 80 m from the marsh edge which still contained water. The pair included a large, thick-bodied individual that I assumed to be female and a smaller individual I assumed to be male based on their behavior (Fig. 1A). The male was biting the female mid-body and twisting himself upside down in what appeared to be an attempt to reposition her. He slowly repeated this behavior for ~30 min (with brief pauses and repositioning of himself), biting the posterior portion of the female's body. He used his biting strategy very gently and she made no attempt to leave the area. They slowly moved around cypress knees and eventually retreated into a pile of leaves and dried Bald Cypress foliage out of sight. Full copulation was not observed; the female did not appear receptive during my observation of the courtship. The male had ~10 small bulging growths on his tail and just anterior to the vent, which could have impeded his ability to copulate (Fig. 1B).

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**HETERODON PLATIRHINOS (Eastern Hog-nosed Snake). PRE-DATION.** On 21 September 2014, in Carvers Creek State Park (ca. 1.6 km NE Manchester, Cumberland Co., North Carolina, USA; 35.204170°N, 78.975688°W, WGS84), a partially-eaten juvenile *Heterodon platirhinos* was found pinned on a barbed wire fence, presumably by a Loggerhead Shrike (*Lanius ludovicianus*). The actual predation was not observed, but shrikes are well known for pinning prey in such fashion, and the site was known to be within a shrike's territory; one was observed frequenting the