

New vertebrate prey for the aquatic salamander *Amphiuma means* (Caudata: Amphiumidae)

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The two-toed amphiuma (*Amphiuma means* Garden, 1821) is a large aquatic salamander widely distributed across the southeastern United States, inhabiting a variety of lentic and lotic aquatic habitats (Johnson and Owen, 2005; Schalk and Luhring, 2010). *Amphiuma means* has been described both an active forager (Dundee and Rossman, 1989) as well as an ambush predator (Conant and Collins, 1998) that utilizes microhabitats that coincides with high prey availability (Schalk et al., 2010).

This species has been described as an opportunistic carnivore capable of consuming a wide variety of prey (Johnson and Owen, 2005). While crayfish have been noted as being an important component of its diet, a number of vertebrates have been documented in the diet of *A. means* (Johnson and Owen, 2005). Known vertebrate prey species include fish, frogs, turtles, snakes, and salamanders (Johnson and Owen, 2005; Schalk et al., 2009; Mitchell, 2013). Herein we document two new vertebrate prey items for *A. means*.

On 7 September 2014, a small *A. means* (SVL = 238 mm; total length = 315 mm; mouth width = 11.97 mm) was captured while electrofishing for fishes in Poplar Creek, a small forested stream in Wake County, North Carolina, USA (N35°.44.940', W78°.28.002'). While in captivity, the *A. means* regurgitated two juvenile green sunfish (*Lepomis cyanellus* Rafinesque, 1819

[Perciformes: Centrarchidae]; first fish: standard length = 30 mm, total length = 38 mm, body depth = 10 mm; second fish: standard length = 25 mm, total length = 31 mm, body depth = 7.99 mm) and a single partially digested larval southern two-lined salamander (*Eurycea cirrigera* (Green, 1831) [Caudata: Plethodontidae]; SVL = 50.0 mm; head width = 7.08 mm; body depth = 7.34 mm). The *A. means* died a short while later and was deposited in the Herpetology Collection at the North Carolina Museum of Natural Sciences (NCSM 82406). To our knowledge, this is the first report of either of these species in the diet of *A. means*.

While *A. means* has been documented as exhibiting some size preference for its prey (Taylor and Ludlam, 2013), in regards to its diet, Hamilton (1950) states that *A. means* eats "that which it can master". In specimens collected from a similar part of its range in North Carolina, Brimley (1920) noted that only crayfish were found in its diet. Green sunfish and southern two-lined salamanders are common and abundant species occurring in streams in this region (Montaña, unpubl. data), their presence in the diet of *A. means* provides further evidence of the broad feeding habits of this generalist predator.

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