Eastern Coachwhip (Coluber flagellum flagellum) Preys on Hatchling Gopher Tortoises (Gopherus polyphemus)

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The varied diet of the Eastern Coachwhip (*Coluber flagellum flagellum*) has been reported to include small mammals, birds and their eggs, turtles, snakes, lizards, anurans, and insects and other arthropods (Beane, 2013). Herein, I report the second documented instance of predation on the Gopher Tortoise (*Gopherus polyphemus*) by *C. f. flagellum*.

At 0940 on the morning of 7 November 2013, I found an adult female *C. f. flagellum* (snout–vent length [SVL] = 1422 mm; total length = 1829 mm; mass = 450 g [with prey]; GMNH 50649) basking near the mouth of a subadult *G. polyphemus* burrow near Mount Pleasant, Wayne County, Georgia (Figure 1). Just after capture, I noticed a pronounced bolus ca. two-thirds down the snake's body. Later the same day, the snake disgorged two hatchling-sized *G. polyphemus* (both ca. 4.8 cm in straight carapace length; GMNH 50663-50664) (Figure 2).

This is only the second report of *G. polyphemus* in the diet of *C. f. flagellum*. Douglass and Winegarner (1977) found the remains of a small *G. polyphemus* in the feces of a slightly larger *C. f. flagellum* (SVL = 1620 mm) captured at Archbold Biological Station, Highlands County, Florida. Other turtle species known to be consumed by *C. f. flagellum* include *Terrapene carolina* (Eastern Box Turtle) (Beane, 2013), *Caretta caretta* (Loggerhead Sea Turtle) (Arpayoglou and Martin, 2011), and *Kinosternon subrubrum* (Eastern Mud Turtle) (Hamilton and Pollack, 1956).



Figure 1. The adult Eastern Coachwhip that disgorged two juvenile Gopher Tortoises.

Other snakes that have been documented as predators of small Gopher Tortoises include the Eastern Indigo Snake (*Drymarchon couperi*) (Stevenson et al., 2010) and the Cottonmouth (*Agkistrodon piscivorus*) (Butler and Sowell, 1996). In fact, hatchling Gopher Tortoises are commonly eaten by Eastern Indigos (Stevenson et al., 2010). Similarly, small Texas Tortoises (*Gopherus berlandieri*) are frequently consumed by Texas Indigo Snakes (*Drymarchon melanurus erebennus*) (Werler and Dixon, 2000; Rich Kazmaier, pers. comm.).

Interestingly, there is mention in the literature of an Eastern Diamondback Rattlesnake (*Crotalus adamanteus*) eating a Gopher Tortoise, by former President Theodore Roosevelt (Roosevelt, 1917). A Captain McCann, whom Roosevelt considered "an accurate and trustworthy observer," reported that he once found a small tortoise inside a diamondback. Roosevelt was surprised, because he assumed that diamondbacks fed exclusively on birds and mammals.

In the southeastern United States, *C. f. flagellum* attains a large size (ca. 1400–1700 mm SVL), is commonly found in sandhill habitats, and, often inhabiting *G. polyphemus* burrows, is considered a "frequent commensal" (Jackson and Milstrey, 1989). Thus, one might suspect that predation on hatchling and smaller juvenile *G. polyphemus* may occur more frequently than reflected by the published literature.

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Figure 2. One of the juvenile Gopher Tortoises recovered from the Eastern Coachwhip (scale of ruler is in inches).

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