

vegicus. At time of death, the snake measured 645 mm SVL and 105 mm tail length. The size at time of collection, indicates that it likely hatched in 1978 or earlier, making this snake at least 29 years old when it died. Previous records for this species (Slavens 1981. Inventory of Live Reptiles and Amphibians in North American Collections, Current January 1, 1981. Woodland Park Zoological Gardens, Seattle, Washington; Snider and Bowler 1992. Longevity of Reptiles and Amphibians in North American Collections, 2nd ed. Herpetol. Circ. 21) do not indicate a specimen older than 22 years. The specimen is deposited in the Texas Natural History Collections (TNHC 66571).

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SIBON LONGIFRENIS (Drab Snail-eater). **REPRODUCTION.**

The genus *Sibon* is one of four groups of neotropical snake specialized for foraging on snails, slugs, and also amphibian eggs (Montgomery et al. 2007. Herpetol. Rev. 38:343). *Sibon longifrenis* is a small nocturnal and arboreal species previously found in Honduras, Costa Rica, and Panama. In Costa Rica it inhabits undisturbed Atlantic Lowland Wet and Moist Forests, Premontane Wet Forests, and Rainforest. It is a seldom seen snake that inhabits deep shady forest (Leenders 2001. A Guide to the Reptiles and Amphibians of Costa Rica. Zona Tropical, Miami, Florida. 305 pp.; Savage 2002. Amphibians and Reptiles of Costa Rica. University Chicago Press, Chicago, Illinois. 934 pp.).

On 14 November 2002, while conducting transect-based surveys, I found a female *S. longifrenis* (288 mm SVL, 135 mm tail, 9.7 g) in the forests of Caño Palma Biological Station, Tortuguero, Limón Province. The snake was moving across a palm tree leaf (*Manicaria saccifera*) at a height of ca. 2 m in an area of wet primary swamp forest (25.4°C, 97%RH). I captured the snake and held it overnight in order to verify identification and measure it. During the night the snake laid two elongate, white eggs (10.0 x 26.1 mm, 1.24 g; 10.1 x 24.8 mm, 1.25 g) in a terrarium. After laying her eggs, the snake weighed 7.1 g. The eggs were placed inside a small terrarium in conditions intended to mimic natural circumstances. Unfortunately by 25 December 2002 both eggs had brown fungi on their surfaces and inspection revealed partially developed dead embryos inside.

Guyer and Donnelly (2005. Amphibians and Reptiles of La Selva, Costa Rica and the Caribbean Slope. University of California Press, Berkeley. 367 pp.) reported *S. longifrenis* as 'presumably an egg-layer.' To the best of my knowledge, this is the first report of clutch size in *S. longifrenis*. Egg-laying has been reported for only a handful of *Sibon* species, but all previously reported clutch sizes range from 2–9 eggs (Kofron 1987. J. Herpetol. 21:210–225; McCoy 1990. Carib. J. Sci. 26:162–166; Campbell 1998. Amphibians and Reptiles of Northern Guatemala, the Yucatan, and Belize. University of Oklahoma Press, Norman, Oklahoma. 380 pp.). November and December are wetter periods for the Tortuguero region and Caño Palma Biological Station receives most of its rainfall around this time.

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THAMNOPHIS ATRATUS ATRATUS (Santa Cruz Gartersnake).

DIET. The interaction between the newt *Taricha granulosa* and the gartersnake *Thamnophis sirtalis* provides a model system for the study of predator-prey coevolution (e.g., Brodie and Brodie 1999. Bioscience 49:557–568). Newts of the genus *Taricha* possess tetrodotoxin (TTX) in their skin and other tissues (Mosher et al. 1964. Science 144:1100–1110; Wakely et al. 1966. Toxicon 3:195–203), which acts as a powerful chemical defense against nearly all potential predators (Brodie 1968. Copeia 1968:307–313). Despite the fact that TTX is a potent neurotoxin, *T. sirtalis* in a number of California and Oregon populations prey on *T. granulosa* (Brodie and Brodie 1990. Evolution 44:651–659; Brodie and Brodie 1991. Evolution 45:221–224). In fact, concentrations of TTX in *T. granulosa* and levels of resistance in *T. sirtalis* generally covary over much of the West Coast in a pattern consistent with an evolutionary arms-race of adaptation and counter-adaptation (Brodie et al. 2002. Evolution 56:2067–2082; Hanifin et al. 2008. PLoS Biol. 6:e60). Until recently, this TTX-mediated coevolution was thought to include only two ecological partners, *T. sirtalis* and *T. granulosa*. However, a similar interaction between gartersnakes and newts was recently discovered in the Sierra Nevada Mountains of California; *T. couchii* prey on both *T. torosa* (Brodie et al. 2005. J. Chem. Ecol. 31:343–356) and *T. sierrae* (Wiseman and Pool 2007. Herpetol. Rev. 38:344–345) and are resistant to TTX at levels concordant with toxicity in sympatric *T. torosa* (Brodie et al. 2005, *op. cit.*). Here we detail a field observation of a *T. atratus* preying on a *T. granulosa*. Our report is significant because it is the first to document predation by *T. atratus* on metamorphosed *Taricha* in the wild, and hints at yet a third arms-race between gartersnakes and newts.

On 13 October 2006 at 1411 h, at Monte Bello Pond (MB05) in the Santa Cruz Mountains, Santa Clara County, California (37.32108°N, 122.18548°W; 576 m elev.), RRG observed an adult *T. atratus atratus* (~ 75 cm SVL) swim ashore with a subadult *T. granulosa* (~ 5 cm SVL) firmly held in its mouth (Fig. 1). The snake settled on the south edge of the pond, characterized by a gentle grade and only sparse vegetation, where it held the newt high off the substrate (~ 15 cm) but kept the majority of its own body anchored in the shallows. The snake gripped the newt through the midsection and proceeded to manipulate the prey deeper into its mouth. The newt struggled to free itself and appeared to exude a milky white liquid along its dorsal surface (glandular secretions including TTX; Cardall et al. 2004. Toxicon 44:933–938), but by 1414 h (3 min) the snake had already succeeded in swallowing the newt tail-first. The snake briefly rested (1 min) before turning back into the pond and slowly swimming away, apparently unaffected by its prey.

Taricha larvae have been reported in the diet of *T. atratus* (Fitch 1940. Univ. California Publ. Zool. 44:1–150; Fitch 1941. California Fish Game 27:2–32; Fox 1951. Univ. California Publ. Zool. 50:485–530; Kuchta 2005. In Lannoo [ed.], Amphibian Declines: The Conservation Status of United States Populations