

**CARPHOPHIS AMOENUS (Common Wormsnake). HATCHING.** At 0932 h on 19 September 2017, one of us (DAM) overturned a trailside rock in in a mesic hardwood forest in Knox County, Tennessee (36.104444°N, 83.763056°W, WGS 84, 360 m elev.) to reveal a recently-hatched *Carphophis amoenus* nest containing at least five eggshells and two hatchlings, but no visible adult female. The rock was approximately 20 x 25 cm in size and was loosely embedded into the ground beneath it. To the best of our knowledge, this is the first documentation of the location of a nest and the timing of hatching in Tennessee (Niemiller et al. 2013. *The Reptiles of Tennessee*. University of Tennessee Press, Knoxville, Tennessee. 366

pp.). The location of the nest, size of the clutch, and timing of hatching are similar to what has reported in neighboring states (e.g., North Carolina, summarized in Palmer and Braswell 1995. *Reptiles of North Carolina*. University of North Carolina Press, Chapel Hill, North Carolina. 412 pp.; Virginia, summarized in Ernst and Ernst 2003. *Snakes of the United States and Canada*. Smithsonian Books, Washington, D.C. 668 pp.).

Submitted by: **DANIEL A. MALAGON** (e-mail: [dmalagon@vols.utk.edu](mailto:dmalagon@vols.utk.edu)) and **TODD W. PIERSON** (e-mail: [tpierso1@vols.utk.edu](mailto:tpierso1@vols.utk.edu)), University of Tennessee, Knoxville, TN, 37996.



FIG. 1. A recently-hatched *Carphophis amoenus* nest as uncovered. Photograph by Daniel A. Malagon

**EURYCEA CIRRIGERA** (Southern Two-lined Salamander). **CLIMBING ABILITY.** McEntire (2016, *Copeia* 104:124–131) suggests that arboreality or climbing behavior is either overlooked or under reported for many species of plethodontid salamanders. She indicates that arboreal behavior has been reported in at least 35% of species of plethodontid salamanders inhabiting the temperate forest regions of North America (McEntire 2016, *op cit.*), which includes many species that are typically considered to be terrestrial. For example, arboreal behavior has been reported in four species of *Eurycea*, including the Northern Two-lined Salamander (*E. bislineata*; LeGros

2013, *Canadian Field-Naturalist* 127:67–69), Longtail Salamander (*E. longicauda*; Anderson and Martino, 1966 *American Midland Naturalist* 75:257–279; Nazdrowicz 2015 Ph.D. Dissertation, University of Delaware, Newark, Delaware, USA 129 p.), Blue Ridge Two-lined Salamander (*E. wilderae*; McEntire *op cit.*), and Southern Two-lined Salamander (*E. cirrigera*; Miloski, 2010. M.S. thesis, Marshall University, Marshall, West Virginia, USA, 106 p.). However, the importance of arboreality has been demonstrated only for the Northern Two-lined Salamander (LeGros *op cit.*), with data on the arboreality of other three species limited to only one or two observations. For example,

McEntire (*op cit.*) indicates that the Southern Two-lined Salamander is facultatively arboreal because of a single observation of one individual found under a burlap bag tied about 1.5 m up the trunk of a tree in West Virginia (Miloski *op cit.*). Here, we provide additional information on climbing behavior by a Southern Two-lined Salamander in middle Tennessee.

On 27 September 2017 at approximately 0330 h, we found a male Southern Two-lined Salamander perched on top of a narrow (1.0 cm dia), cylindrical metal-rod used to support a glass hummingbird feeder (Fig. 1). To reach its perch, the salamander had to climb 185 cm up, 45 cm along and down the narrow metal rod. Although humidity was high (approaching 100%) during the early morning, no precipitation was recorded that day; consequently, the metal rod was dry when the salamander was discovered (Fig. 2). We do not know when the salamander climbed the rod, but it remained perched in position until 0500 hours, when we either inadvertently startled the salamander, or it was stimulated to seek cover because of impending daybreak. Regardless, from the time of discovery the salamander remained perched on the rod for at least 1.5 hours.

Although many plethodontids are known to climb vegetation (McEntire *op cit.*),

presumably to forage (but see McEntire *op cit.* for discussion of this topic), most reports of arboreality are of salamanders in low vegetation during or immediately after rain storms. However, our observation indicates that Southern Two-lined Salamanders are capable of climbing to heights of nearly 2 m, taking circuitous routes to reach their destination, and climbing even during rainless nights. During night surveys for plethodontid salamanders, we seldom search for Southern Two-lined Salamanders in vegetation, and never look for them at eye-level; consequently, we are uncertain how important arboreality is to individuals of this species. However, we agree with McEntire (*op cit.*) who suggests that arboreality in temperate species of plethodontid salamanders might be more common than currently recognized.

Submitted by **BRIAN T. MILLER** (e-mail: [brian.miller@mtsu.edu](mailto:brian.miller@mtsu.edu)) Department of Biology, Middle Tennessee State University, Murfreesboro, Tennessee, USA 37132, and **JOYCE L. MILLER** (e-mail: [joyce.miller@mtsu.edu](mailto:joyce.miller@mtsu.edu)) MTSU Integrative Microscopy and Imaging Center, Middle Tennessee State University, Murfreesboro, Tennessee, USA, 37132.