



INTRODUCED SPECIES

A New State Record of the Cuban Treefrog, *Osteopilus septentrionalis* (Duméril and Bibron 1841) (Hylidae), in North Carolina

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The Cuban Treefrog, *Osteopilus septentrionalis* (Duméril and Bibron 1841) (Fig. 1), is native to Cuba, the Bahamas, and the Cayman Islands, and is well known for its invasive capabilities (Meshaka et al. 2001). Barbour (1931) was the first to report the presence of this species in the United

States (Monroe County, Florida), and this invasive amphibian subsequently has spread rapidly throughout the extreme southeastern United States (Welker 2004). The successful expansion of the species' introduced range likely can be attributed to high fecundity, an ability to out-compete native anurans



Fig. 1. A Cuban Treefrog (*Osteopilus septentrionalis*) from Gainesville, Alachua Co., Florida. Motor vehicle transport of cargo and ornamental plants has been instrumental in the spread of this species in Florida and is the likely introduction pathway for these frogs into North Carolina. Photograph by Kenneth L. Krysko.

and tolerate cold weather, and the capacity to prey upon an array of native species (Austin 1973; Ashton and Ashton 1988; Meshaka 1994, 1996; Campbell 1999; Vargas Salinas 2006; Granatosky and Krysko 2011; Granatosky et al. 2011). The spread of the species appears to rely largely on anthropogenic transport via motor vehicles or potted landscaping vegetation (Lever 2003, Kraus 2009, Krysko et al. 2011, Meshaka 2011).

Although sightings and captures of *O. septentrionalis* in North Carolina have occurred (J.C. Beane, pers. comm.), no voucher specimens or published verifications currently exist. Therefore, we report the first voucher specimen of *O. septentrionalis* from a single location in Chapel Hill, North Carolina. This represents the first recorded sighting of *O. septentrionalis* in the state and likely represents a recent and isolated introduction.

On 04 January 2014, MCG collected an *Osteopilus septentrionalis* (UF-Herpetology 172200) from Townhouse Apartments of Chapel Hill, 425 Hillsborough Street, Chapel Hill, Orange County, North Carolina (35.919372, -79.052568; Datum WGS84). The frog was in a lethargic state crawling on a sidewalk. No additional individuals were observed. The juvenile (< 44 mm SVL; Meshaka 2001) was deposited in the Division of Herpetology at the Florida Museum of Natural History. Paul E. Moler (pers. comm.) confirmed our identification.

Because only a single juvenile individual was found at the collection site, we believe that this observation represents a single introduction event. The fact that the specimen was collected in an apartment complex in close proximity to the University of North Carolina at Chapel Hill during early January when students were returning from winter break suggests that the likely introduction pathway was via motor vehicle transport from an area with established populations of Cuban Treefrogs. The introduction of nonnative amphibians and reptiles by means of cargo or ornamental plant transfer, at least in Florida, is recognized as a major introduction pathway second only to the pet trade (Krysko et al. 2011). Also, North Carolina clearly is an area at potential risk of continuing ecological invasions by exotic herpetofauna (Beane and Corey 2010, Beane 2013, Granatosky and Krysko 2013). The scientific community should promote early detection and foster public knowledge about the ecological dangers of invasive species.

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