



The Nonnative Black Spiny-tailed Iguana, *Ctenosaura similis* Gray 1831 (Squamata: Iguanidae), Preying upon the Native Southeastern Five-lined Skink, *Plestiodon inexpectatus* Taylor 1932 (Squamata: Scincidae), in Southern Florida

Kenneth L. Krysko¹ and Smith B. Juan²

¹Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611, USA (kenneyk@ufl.edu)

²16455 NE 32nd Avenue, North Miami Beach, Florida 33160, USA (snookseason@yahoo.com)

Photographs by Smith B. Juan.

The Black Spiny-tailed Iguana, *Ctenosaura similis* Gray 1831 (Squamata: Iguanidae), is native to many areas in North and Central America, from Mexico south to Panama (Traveset 1990). This species has been introduced to various Caribbean islands, as well as Florida, USA (Krysko et al. 2003, Kraus 2009). *Ctenosaura similis* illustrates an ontogenetic diet shift; juveniles are primarily carnivorous and adults are herbivorous (Montanucci 1968, Fitch and Henderson 1978, Lee 2000, Krysko et al. 2009). The diet of this invasive species on Gasparilla Island, Charlotte and Lee counties, and Key Biscayne, Miami-Dade County, Florida, includes mostly vegetation, but two vertebrates (native Gopher Tortoise, *Gopherus polyphemus*, and nonnative Bark Anole, *Anolis distichus*) have been documented (Avery et al. 2009, Krysko et al. 2009, Stroud and Krysko in press). Herein, we augment our knowledge regarding the diet of *C. similis* on Key Biscayne to include the native Southeastern Five-lined Skink, *Plestiodon inexpectatus* Taylor 1932 (Squamata: Scincidae), the only skink documented on Key Biscayne (Krysko et al. 2010).

On 5 May 2013 at 1406 h, we observed an adult female *Ctenosaura similis* (Fig. 1) in leaf litter along a trail at Bill Baggs State Park, Key Biscayne (25.674795°N, 80.161332°W, WGS84). This *C. similis* was thrashing around and had an adult male *Plestiodon inexpectatus* in its mouth and quickly swallowed it in ca. 1 min. After consuming the skink, within ca. 20 sec the *C. similis* picked up and consumed the skink's tail that must have been broken off in the process of preying upon the main body of the smaller lizard. This is the first documentation of *C. similis* consuming *Plestiodon inexpectatus*.

Photographs of this event were deposited (photographic vouchers UF 170501) in the Division of Herpetology, Florida Museum of Natural History, University of Florida.

Acknowledgments

We thank Robert Powell and an anonymous reviewer for helpful comments on this paper.

Literature Cited

- Avery, M.L., E.A. Tillman, and K.L. Krysko. 2009. *Gopherus polyphemus* (Gopher Tortoise), *Ctenosaura similis* (Gray's Spiny-tailed Iguana). Predation. *Herpetological Review* 40:435.
- Fitch, H.S. and R.W. Henderson. 1978. Ecology and exploitation of *Ctenosaura similis*. *University of Kansas Science Bulletin* 51:483–500.
- Kraus, F. 2009. *Alien Reptiles and Amphibians, a Scientific Compendium, and Analysis*. Invading Nature: Springer Series in Invasion Biology 4. Springer, Dordrecht, The Netherlands.
- Krysko, K.L., K.M. Enge, E.M. Donlan, E.A. Golden, J.P. Burgess, and K.W. Larson. 2010. The non-marine herpetofauna of Key Biscayne, Florida. *Herpetological Conservation and Biology* 5:132–142.
- Krysko, K.L., F.W. King, K.M. Enge, and A.T. Reppas. 2003. Distribution of the Introduced Black Spiny-tailed Iguana (*Ctenosaura similis*) on the Southwestern Coast of Florida. *Florida Scientist* 66:74–79.
- Krysko, K.L., K.W. Larson, D. Diep, E. Abellana, and E.R. McKercher. 2009. Diet of the nonindigenous Black Spiny-tailed Iguana, *Ctenosaura similis* (Gray 1831)(Sauria: Iguanidae) in southern Florida. *Florida Scientist* 72:48–58.
- Lee, J.C. 2000. *A Field Guide to the Amphibians and Reptiles of the Maya World: The Lowlands of Mexico, Northern Guatemala, and Belize*. Comstock Publishing Associates, New York.
- Montanucci, R.R. 1968. Comparative dentition in four iguanid lizards. *Herpetologica* 24:305–315.
- Stroud, J.T. and K.L. Krysko. *Ctenosaura similis* (Gray's Spiny-tailed Iguana). Non-native diet. *Herpetological Review* 44:322.
- Traveset, A. 1990. *Ctenosaura similis* Gray (Iguanidae) as a seed disperser in a Central American deciduous forest. *American Midland Naturalist* 123:402–404.

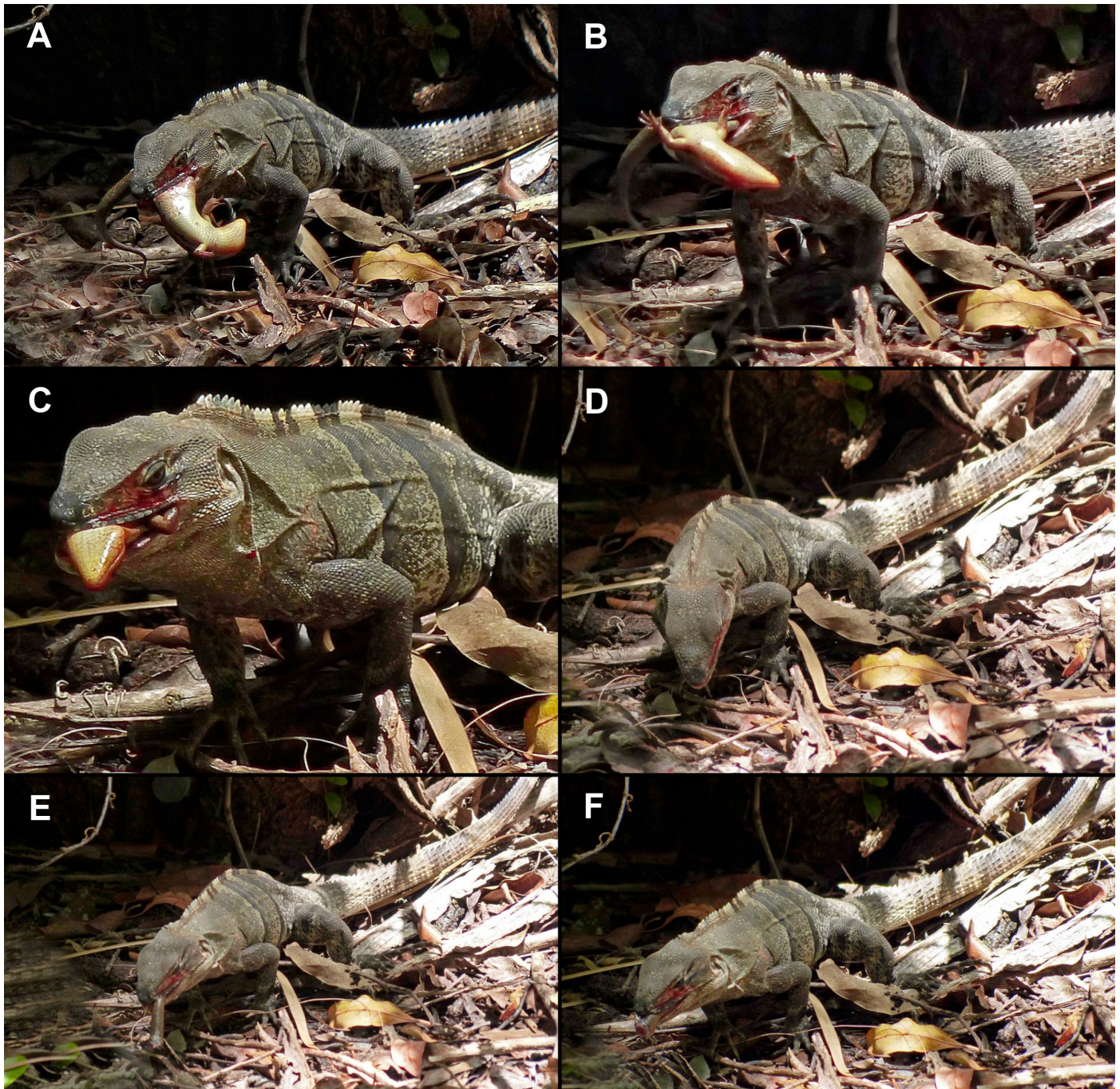


Fig. 1. Adult female nonnative Black Spiny-tailed Iguana (*Ctenosaura similis*) with captured native Southeastern Five-lined Skink (*Plestiodon inexpectatus*) at Bill Baggs Cape Florida State Park, Miami-Dade County, Florida. A. The iguana has captured the skink. B. Consuming the skink. C. Swallowing the skink. D. Noticing tail movement on the ground. E. Picking up the tail. F. Swallowing the tail.