



## INTRODUCED SPECIES

# The Many-lined Sun Skink, *Eutropis multifasciata* (Kuhl 1820) (Mabuyidae), a New Population in Broward County, Florida

Michael R. Rochford<sup>1</sup>, Jennifer K. Ketterlin<sup>2</sup>, Joy Vinci<sup>1</sup>, Daniel T. Alexander<sup>1</sup>, and Frank J. Mazzotti<sup>1</sup>

<sup>1</sup>University of Florida, Fort Lauderdale Research and Education Center, 3205 College Avenue, Fort Lauderdale, Florida 33314, USA (miker@ufl.edu; fjma@ufl.edu)

<sup>2</sup>National Park Service, South Florida Natural Resources Center, 950 North Krome Avenue, Homestead, Florida 33030, USA (Jennifer\_ketterlin@nps.gov)

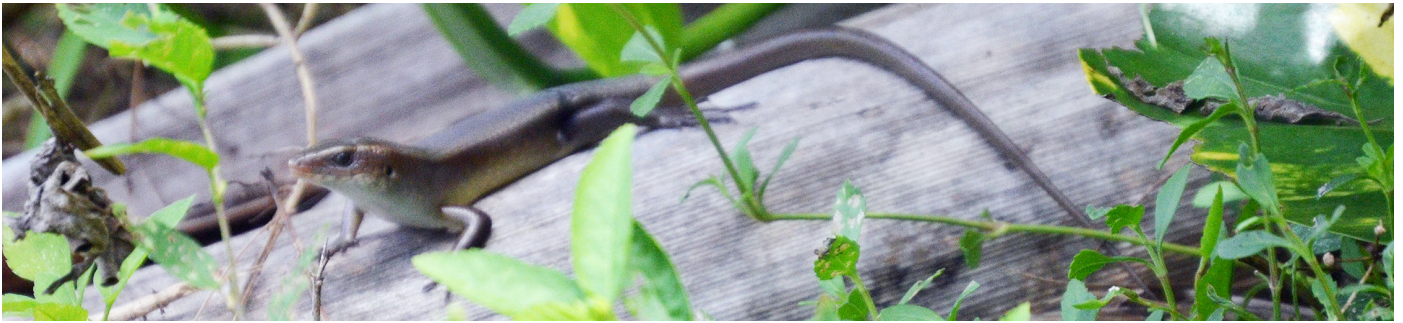
The range of the Many-lined Sun Skink, *Eutropis multifasciata* (Kuhl 1820) extends from India east to the Philippines and Papua New Guinea in southern Asia (Mausfeld and Schmitz 2003). Dorsal ground color of *E. multifasciata* is brown or tan with red, yellow, or orange lateral stripes present in males whereas females are brown or black laterally. Small, white lateral spots may be present in either sex and the ventral side of the head may be white or yellow. Dorsal scales have three parallel keels. Mean snout-vent length (SVL) is larger in males than females and males have larger heads, greater body mass, and longer tails than females with the same SVL (Ngo et al. 2014). In Malaysia, *E. multifasciata* exhibits prolonged reproductive cycles. Males produce sperm year-round while females may be fertile 10 months of the year (Goldberg 2013). The diet of *E. multifasciata* in Vietnam consists mostly of grasshoppers, termites, spiders, ants, and insect larvae, but they also consume small vertebrates such as frogs, skinks, and geckos (Ngo et al. 2014). Meshaka (1999) reported an isolated, established population from the grounds of the Kampong, a tropical garden in Coconut Grove, Miami-Dade County, Florida, where they were seen on paved walkways, mulch piles, and branches.

At 1630 h on 24 June 2018, JKK, JV, and DTA photographed an adult male *Eutropis multifasciata* (Fig. 1; UF-Herpetology 184865) near the edge of a pond in Davie, Broward County (26.058864°N, -80.229993°W; datum WGS84). Pond edges were lined with Australian Pine (*Casuarina* sp.) with very little understory other than fallen pine needles. On 25 June 2018, MRR visited the site and photographed an adult female *E. multifasciata* (Fig. 2; UF-Herpetology 184866; 26.057966°N, -80.229804°W; datum WGS84) basking on a fallen log at 1347 h and one adult male active on a curb in a nearby parking lot at 1405 h (Fig. 3; UF-Herpetology 184867; 26.059177°N, -80.230560°W; datum WGS84). On 1 August 2018, MRR returned to the site and found one adult male and five adult

females between 1518 h and 1729 h, expanding the known distribution in this area to the east and south, and slightly north and west (Fig. 4). Walter E. Meshaka, Jr. verified the identity of the species and confirmed the sexes of photographed individuals. Additional habitat types were palm plantations with sparse understory consisting mostly of detritus; clearings with thick, green, low-growing plant cover; and hardwood hammocks overgrown with broad-leafed vines. We



**Fig. 1.** *In situ* photograph of an adult male Many-lined Sun Skink, *Eutropis multifasciata* (UF-Herpetology 184865), from Davie, Broward County, Florida. Photograph by Jennifer K. Ketterlin.



**Fig. 2.** *In situ* photograph of an adult female Many-lined Sun Skink, *Eutropis multifasciata* (UF-Herpetology 184866), from Davie, Broward County, Florida. Photograph by Michael R. Rochford.

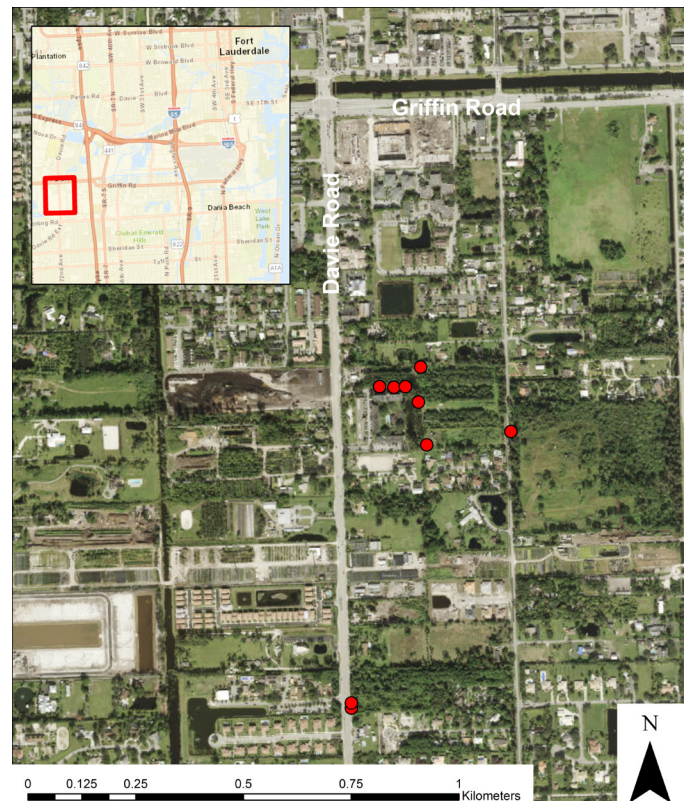


**Fig. 3.** Lateral view of an adult male Many-lined Sun Skink, *Eutropis multifasciata* (UF-Herpetology 184867), from Davie, Broward County, Florida. Photograph by Michael R. Rochford.

observed skinks on the ground and perched in slightly elevated positions on root systems and piles of vegetation. The highest perch site was approximately 1 m above the ground on a fallen tree trunk.

This is the first report of *Eutropis multifasciata* from Broward County, Florida. The presence of multiple individuals of both sexes likely represents a stage-3 introduction (*sensu* Colautti and MacIsaac 2004). The Miami-Dade County population arrived via cargo (Krysko et al. 2016). The two populations are approximately 40 km apart and likely not related. Introduction of the new population in Broward County might have been through accidental escape or intentional release of animals circulating in the pet trade, especially given a sighting of a Dumeril's Boa (*Acrantophis dumerili*) at the same site. Two skinks were found approximately 1.4 km from a pet dealer implicated in the introduction of many nonnative reptiles and amphibians (Krysko et al. 2016). However, we cannot rule out the possibility of *E. multifasciata* arriving in imported plants from neighboring nurseries.

This species may depredate native insects, frogs, and lizards and could compete with native herpetofauna for resources. Other herpetofauna observed at the site included native *Alligator mississippiensis*, *Chelydra serpentina*, *Coluber constrictor*, *Pseudemys* sp., and *Thamnophis sirtalis*; and nonnative species including *Ameiva ameiva*, *Anolis sagrei*, *Basiliscus vittatus*,



**Fig. 4.** Map showing the locations of Many-lined Sun Skink (*Eutropis multifasciata*) observations in Davie, Broward County, Florida, USA.

*Eleutherodactylus planirostris*, *Iguana iguana*, and *Trachemys scripta*. Detection of *E. multifasciata* during summer surveys at this site is most successful in the afternoon. Rapid response efforts to eradicate this population could be successful (e.g., Chao and Lin 2017) if it is geographically isolated, but additional surveys are needed to determine the extent of its range. Abundant cover and many small parcels of private property make survey and potential control efforts difficult.

### Literature Cited

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