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***TUPINAMBIS MERIANAE*(Argentine Giant Tegu); *PANTHERO- PHIS GUTTATUS* (Red Cornsnake). NON-PREDATORY KILLING**

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TUPINAMBIS MERIANAE (Argentine Giant Tegu); **PANTHEROPHIS GUTTATUS** (Red Cornsnake). **NON-PREDATORY KILLING.** *Tupinambis merianae* is an established invasive lizard in Florida, USA, where a population was discovered initially in Balm Boyette Scrub Preserve, Hillsborough Co. (Enge et al. 2006. *In Proceedings 28th Annual Gopher Tortoise Council Meeting*, Valdosta, Georgia; Engeman et al. 2011. *Curr. Zool.* 57:599–612). The threats posed by this species to native species are undetermined, although it has been observed using Gopher Tortoise (*Gopherus polyphemus*) burrows, where it potentially could have similar burrow usurpation and juvenile predation impacts as does another large invasive lizard in southern Florida, Gray's Spiny-tailed Iguana (*Ctenosaura similis*) (Avery et al. 2009. *Herpetol. Rev.* 40:435; Engeman et al. 2009. *Herpetol. Rev.* 40:84). We have been testing a variety of methods to detect and index populations of *T. merianae* and to investigate their tortoise burrow usage in Balm Boyette Scrub Preserve (Kaiser et al. 2011. *In Proceedings 33rd Annual Gopher Tortoise Council Meeting*, Orlando, Florida). We report here evidence from these investigations that *T. merianae* may pose a threat to snakes.

We used wildlife cameras to obtain still photographs and video recordings at 16 *G. polyphemus* burrow entrances (Kaiser et al., *op. cit.*). On 14 June 2011 at 0828 h EST, we obtained a video recording of a *T. merianae* (ca. 120 cm TL) attacking a

Red Cornsnake (*Pantherophis guttatus*) (ca. 132 cm TL). The lizard was observed carrying and shaking the snake violently as it entered a tortoise burrow being monitored by one of our video cameras. Within 4 sec, the lizard emerged (the tail of the snake remained visible the entire time) still carrying and shaking the less active snake. Within another 4 sec, the lizard disappeared from view carrying the snake.

Adult *T. merianae* in Brazil occasionally feed on snakes (Mercolli and Yanosky 1994. *Herpetol. J.* 4:15–190), but this snake appeared too large for the lizard to consume. We cannot explain the lizard's behavior towards the snake, but a defense mechanism seems plausible, particularly since *C. similis* has been observed exhibiting this behavior in Florida (Engeman et al. 2009. *Herpetol. Rev.* 40:84–85). Janzen and Brodie (1995. *J. Herpetol.* 29:132–136) studied *C. similis* responses to color cues by using different color patterns on snake replicas and found that brightly colored replicas (red, yellow, black) elicited the most attacks. Engeman et al. (2009, *op. cit.*) observed a *C. similis* attack a Southern Black Racer (*Coluber constrictor priapus*) with a drab, monotone color and no pattern. The *P. guttatus* attacked by the *T. merianae* was a bright rust-red color, but we do not know whether its coloration was a contributing factor in the attack. The *T. merianae* was obviously willing to attack a snake, and more importantly, this agonistic behavior may have implications regarding its potential to impact snakes, including small individuals of the Eastern Indigo Snake (*Drymarchon couperi*), a federally threatened species. An introduced population of the Gold Tegu (*Tupinambis tequixina*) on the island of San Andrés, Colombia, was suspected of adversely impacting an endemic snake species (Fitzgerald et al. 2005. *In Joint Annual Meeting of Ichthyologists and Herpetologists*, Tampa, Florida). High-density populations of *T. merianae*, such as is apparently found in Balm Boyette Scrub Preserve, could negatively affect snake recruitment and numbers through such behavior.

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