

Mating of Argentine Black-and-white Tegus (Salvator merianae) in Miami-Dade County, Florida, USA

Jenna M. Cole, Cassidy Klovanish, and Frank J. Mazzotti

Fort Lauderdale Research and Education Center, University of Florida, Fort Lauderdale, Florida 33314 (jcole1@ufl.edu)

Florida, especially the southern part of the state, has become a hotspot for established nonnative herpetofaunal species. Of 63 established exotic reptilian and amphibian species, 48 are lizards (Krysko et al. 2016). The Argentine Blackand-white Tegu, *Salvator merianae* (Fig. 1) is an omnivorous lizard with a broad diet (e.g., Mercolli and Yanosky 1994; Kiefer and Sazima 2002) that is established and breeding in southern Florida (Enge 2006; Pernas et al. 2012; Krysko et al. 2016).

On 29 March 2019, JC and CK observed a mating pair of tegus confined in a Tomahawk model S50 live trap used for tegu removal in southern Florida (Fig. 2). This trap, made of 16-gauge wire with a $\frac{1}{2}$ x 1" mesh size, is equipped with a flush-mounted repeating trap door and has dimensions of $24 \times 5 \times 5$ ". It was baited with a chicken egg. The repeating



Fig. 1. An adult Argentine Black-and-white Tegu (*Salvator merianae*) in the Southern Glades Wildlife and Environmental Area, Miami-Dade County, Florida. Photograph by Nicholas Scobel.

door allows for the capture of multiple animals. We could not determine whether the male or female entered the trap first but speculate that the female entered the trap for the bait and was followed by the male, which entered the trap to copulate with the female.

Behaviors observed included the male biting the hindleg, neck, and tail of the female and positioning himself over her with hemipenes exposed. These corresponded to tegu courtship behavior described by Sazima (2015) and Lopes and Abe (1999). This event also fell within the time frame for mating by captive tegus held in outdoor cages in Florida (Enge 2006). This is the first observation of mating by wild tegus in Florida.

Literature Cited

Enge, K.M. 2006. FWC Bioprofile for the Argentine Black and White Tegu (*Tupinambis merianae*). Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida.

Kiefer, M.C. and I. Sazima. 2002. Diet of juvenile tegu lizard *Tupinambis merianae* (Teiidae) in southeastern Brazil. *Amphibia-Reptilia* 23: 105–108.

Krysko, K.L., L.A. Somma, D.C. Smith, C.R. Gillette, D. Cueva, J.A. Wasilewski, K.M. Enge, S.A. Johnson, T.S. Campbell, J.R. Edwards, M.R. Rochford, R. Tompkins, J.F. Fobb, S. Mullin, C.J. Lechowicz, D. Hazelton, and A. Warren. 2016. New verified nonindigenous amphibians and reptiles in Florida through 2015, with a summary of over 152 years of introductions. Reptiles & Amphibians 23: 110–143.

Lopes, H.R. and A.S. Abe. 1999. Biologia reprodutivo e comportamento do teiú, Tupinambis merianae, em cativeiro (Reptilia, Teiidae), pp. 259–272. In: T.G. Fang, O.L. Montenegro, and R.E. Bodmer (eds.), Manejo y Conservación de Fauna Silvestre en América Latina. Instituto de Ecología, La Paz, Bolivia.

Mercolli, C. and A. Yanosky. 1994. The diet of adult *Tupinambis teguixin* (Sauria, Teiidae) in the eastern Chaco of Argentina. *The Herpetological Journal* 4: 15–19.

Pernas, T., D.J. Giardina, A. McKinley, A. Parns, and F.J. Mazzotti. 2012. First observations of nesting by the Argentine Black and White Tegu, *Tupinambis merianae*, in south Florida. *Southeastern Naturalist* 11: 765–771.

Sazima, I. 2015. Corpse bride irresistible: A dead female tegu lizard (*Salvator merianae*) courted by males for two days at an urban park in south-eastern Brazil. *Herpetology Notes* 8: 15–18.

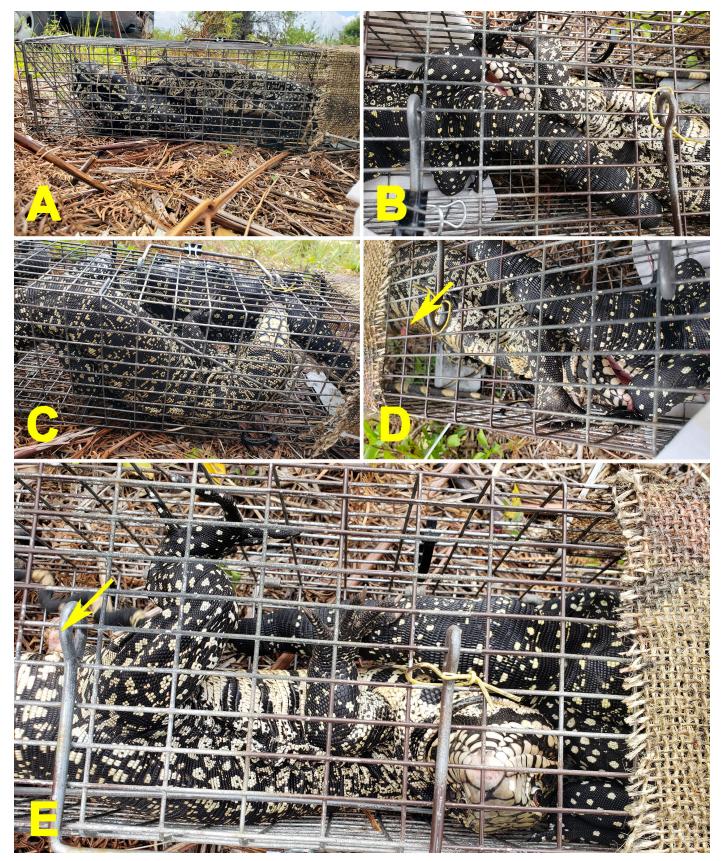


Fig. 2. Male and female Argentine Black-and-white Tegus (*S. merianae*) engaging in courtship behavior: (A) male (top) mounting the female (bottom); (B) male biting the hindleg of the female; (C) male biting the tail of the female; (D) male biting the hindleg of the female (arrow indicates exposed hemipenes); (E) male alongside the female (arrow indicates exposed hemipenes). Photographs by Jenna Cole.