

HETERONOTIA BINOEI (Bynoe's Gecko). **DEFENSIVE BEHAVIORS.** Lizards employ a wide range of anti-predator strategies, which include death-feigning or thanatosis and Batesian mimicry (Costa Anaissi et al. 2020. *Herpetol. Notes* 13:859–861). Death-feigning is a strategy used by many lizards (Costa-Campos and Anaissi 2020. *Herpetol. Bull.* 15:26–27) and is believed to minimize further attack by reducing the need of a predator to subdue prey further (Miyatake et al. 2004. *Proc. R. Soc. London B.* 271:2293–2296). Alternatively, many geckos exhibit Batesian mimicry, where they raise their tails to imitate a scorpion's posture (Brandão and Motta 2005. *Phyllomedusa* 4:139–145). Here, I report an observation of defensive behavior in a juvenile *Heteronotia binoei* that bears resemblance to death-feigning and Batesian mimicry.

At 1325 h on 13 November 2012, I found a juvenile *H. binoei* (2.1 cm SVL) under a piece of discarded plastic in Cumbil State Forest, 7 km NE of Kenebri, New South Wales, Australia (30.7306°S, 149.0814°E; WGS 84; 300 m elev.). Within seconds of being uncovered, the *H. binoei* assumed an immobile posture while standing, its body stiffened, limbs outstretched, neck twisted, mouth agape, and snout pointing down (Fig. 1). Although the main proportion of the tail was missing, appearing to have been recently autonomized, it looked like the remaining nub was in a raised, motionless position. This posture was maintained for 3 min until shed bark was placed over the *H. binoei* to replace the plastic shelter. The only movement observed during this time was the single gradual closing of the mouth.

To my knowledge, this is the first report of defensive behaviors in *H. binoei*. The stiffened motionless posture of the *H. binoei* resembles death-feigning, a strategy deployed by a range of taxa, but is uncommon in geckos (Green 1988. *In* Gans and Huey [eds.], *Biology of Reptilia*, pp. 1–152. Alan R. Liss, New York, New York). However, the mouth gaping and possibly raised tail nub may also suggest posturing to resemble, or mimicking, a scorpion (Anaissi and Costa-Campos. 2021. *Herpetol. Notes* 14:475–477). The recent tail loss makes it difficult to confirm the exact nature of this behavior at this time.



FIG. 1. Defensive behavior of a *Heteronotia binoei* from Cumbil State Forest, near Kenebri, NSW, Australia, after being uncovered under a refuge.

MATTHEW MO, NSW Department of Planning and Environment, 4 Parramatta Square, 12 Darcy Street, Parramatta, NSW 2150; e-mail: matthew.mo@environment.nsw.gov.au.

HOLBROOKIA SUBCAUDALIS (Tamaulipan Spot-tailed Earless Lizard). **PHYSICAL ABERRANCY.** *Holbrookia subcaudalis* is found in the Tamaulipan biotic province of southern Texas and adjacent northern Mexico and inhabits grasslands, woodlands, agricultural fields, and anthropogenically disturbed areas (Hibbitts et al. 2019. *Zootaxa* 4619:139–154). This species was recently upgraded from subspecies status from *H. subcaudalis subcaudalis* and little is known about this taxon's natural history. Digit loss is not uncommon in lizards (Gandia et al. 2018. *IRCF Rept. Amphib.* 25:35–36), however, entirely missing limbs are uncommon (Skinner et al. 2008. *BMC Evol. Biol.* 8:310) and can be problematic for a species such as *H. subcaudalis* that rely on running as a primary predator escape strategy. Here we report on limb loss and behavior in *H. subcaudalis* from Texas.

During a collection survey on 14 July 2021 in Nueces County, Texas (27.71288°N, 97.84953°W; WGS 84; 563 m elev.), we collected an adult female *H. subcaudalis* (68 mm SVL, 117 mm total length, 10.0 g) on a caliche road that bordered a recently harvested maize field. The female appeared healthy in all aspects except it was missing its entire rear left leg. There was no leg stump or visible scarring. There was no obvious reason for the loss of limb and the female appeared capable of running without any noticeable problem and at typical, albeit anecdotally, *H. subcaudalis* speed.

Because no obvious explanation for the limb loss was apparent, we posit that the limb loss was from either: 1) a predation attempt, 2) was caused as a physical injury by an agricultural implement (i.e., disc, mower, etc.), or 3) it could have occurred in embryonic development. Although the latter explanation is not considered common, the possibility is plausible (Andrews 2004. *In* Deeming [ed.], *Reptilian Incubation: Environmental, Evolution, and Behavior*, pp. 75–102. Nottingham University Press, Nottingham, UK). The lack of a rear leg did not negatively affect this lizard's reproductive output because on 20 July 2021 she laid a clutch of 11 eggs in captivity, hence the lizard appeared to function normally.

E. DRAKE RANGEL (e-mail:evan.rangel@students.tamuk.edu), **SCOTT E. HENKE** (e-mail: scott.henke@tamuk.edu), **CHRISTIN MOELLER** (e-mail: christin.moeller@students.tamuk.edu), and **LUKE WILLARD**, Caesar Kleber Wildlife Research Institute, MSC 218, Texas A&M University-Kingsville, Kingsville, Texas 78363, USA (e-mail: luke.willard@students.tamuk.edu); **CORD B. EVERSOLE**, Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, Nacogdoches, Texas 75965, USA (e-mail: cord.eversole@gmail.com); **RUBY AYALA**, Department of Biology and Chemistry, Texas A&M International University, Laredo, Texas 78041, USA (e-mail: ruby-ayala87@gmail.com).

MANCIOLA GUAPORICOLA (Dunn's Mabuya; calango-liso). **PREDATION.** *Manciola guaporicola* is a moderate sized skink (up to 98 mm SVL) that occurs in rocky areas and gallery forest habitats of plateaus and floodplains (Barros et al. 2022. *Austral Ecol.* 47:983–996). The only known predators of this lizard are two snakes, *Oxyrhopus trigeminus* (Ávila-Pires 1995. *Zool. Verhand.* 299:1–706) and *Oxybelis fulgidus* (Scartozzoni et al. 2009. *South Am. J. Herpetol.* 4:81–89). Here we report the first predation record by a bird, the Savanna Hawk (*Buteogallus meridionalis*), upon *M. guaporicola*.

On 29 September 2018, at 1045 h, we observed a *B. meridionalis* foraging in a pasture in Refúgio Ecológico Caiman