

This observation is the first direct record of *M. t. centrata* using a burrow of a Nine-banded Armadillo. This is significant because armadillo burrows are documented providing shelter and forage for a variety of herpetofauna, including the Eastern Diamondback Rattlesnake (*Crotalus adamanteus*; Means 2017. *Diamonds in the Rough: Natural History of the Eastern Diamondback Rattlesnake*. Tall Timber Press, Tallahassee, Florida. 390 pp.), Eastern Kingsnake (*Lampropeltis getula*; Steen et al. 2010. *Copeia* 2010:227–231), Furrowed Wood Turtle (*Rhinoclemmys areolata*) Neotropical Rattlesnake (*Crotalus durissus*), Tropical Rat Snake (*Spilotes pullatus*), Boa Constrictor (*Boa constrictor*), and Basilisk lizard (*Basiliscus vittatus*) (Platt et al. 2004. *Mamm. Biol.* 69:217–224). Additional reptile species found using armadillo burrows during this study that have not previously been documented include Coachwhip snakes (*Masticophis flagellum*) and Black Racers (*Coluber constrictor*). These observations indicate that armadillo burrows might function as important refugia for herpetofauna by facilitating protection against temperature extremes, fire, and predation. Furthermore, our observation suggests that these burrows provide suitable soil conditions for *M. t. centrata* nesting when located adjacent to the marsh habitats in which they reside. Additional research is needed to understand whether armadillo burrows could provide ideal nesting habitat for *M. t. centrata* in areas where they co-occur.

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PSEUDEMYNS GORZUGI (Rio Grande Cooter). KYPHOSIS. Kyphosis and kyphoscoliosis are deformations of the spine that can cause doming of the carapace in turtles. These two forms of shell deformities have been reported in many chelonian species, including *Trachemys scripta elegans* (Tucker et al. 2007. *Herpetol. Rev.* 38:337), *Emydura macquarii krefftii* (Trembath 2009. *Chelon. Conserv. Biol.* 8:94–95), *Podocnemis erythrocephala* (Bernhard et al. 2012. *Herpetol. Rev.* 43:639), *Graptemys oculifera* (Selman et al. 2012. *Chelon. Conserv. Biol.* 11:259–261), *Deirochelys reticularia chrysea* (Mitchell et al. 2014. *Herpetol. Rev.* 45:312), *Graptemys sabinensis* (Louque et al. 2015. *Herpetol. Rev.* 46:81), *Podocnemis sextuberculata* (Perrone et al. 2016. *Herpetol. Rev.* 47:287), and *Apalone ferox* (Taylor et al. 2017. *Herpetol. Rev.* 48:418–419). However, these conditions are generally rare, with only 0.93% of 216 *G. sabinensis* (Louque et al., *op. cit.*) and 0.06% out of 21,786 *T. scripta elegans* (Tucker et al., *op. cit.*) exhibiting kyphosis; kyphoscoliosis is even rarer with very few cases reported, including *Pseudemys suwaniensis* (Mitchell et al. 2016. *Herpetol. Rev.* 47:127–128) and *D. reticularia chrysea* (Mitchell et al., *op. cit.*). During our long-term population study of *Pseudemys gorzugi* in southeastern New Mexico, a female specimen exhibiting an obvious carapace deformation consistent with kyphosis was captured via snorkeling, representing the first reported case of kyphosis in *P. gorzugi* (Fig. 1A).

The turtle was captured on 12 June 2018 in a pond near the Black River, Eddy County, New Mexico, USA (32.11447°N, 104.578°W, WGS 84; 1067 m elev.), with a straight-line carapace

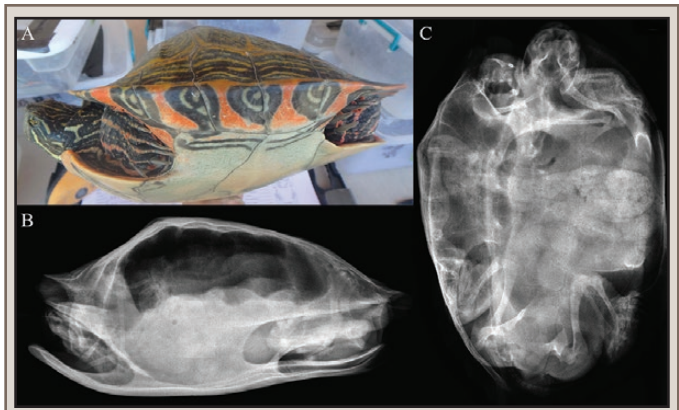


FIG. 1. Female *Pseudemys gorzugi* expressing typical spinal deformation associated with kyphosis: a lateral view photograph (A), a lateral view radiograph (B), and a dorsal view radiograph at 45-degree angle (C).

length (CL) of 220 mm and a body depth (BD) of 103 mm. The turtle was radiographed at Desert Willow Wildlife Rehabilitation Center, Carlsbad, New Mexico, which confirmed the spinal deformation (Fig. 1B and 1C.). Since 2016, we have marked 420 *P. gorzugi* along the Black River and the lentic water bodies in the surrounding area. To date, this is the only *P. gorzugi* found with kyphosis which is 0.24% of all marked individuals.

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TERRAPENE CAROLINA CAROLINA (Woodland Box Turtle). CLAW MORPHOLOGY. Herein, I report observations of an individual female *Terrapene carolina carolina* with exceptionally long claws on the hind limbs from Columbia County, Pennsylvania, USA (exact locality information withheld due to conservation concerns). On 29 May 2015 at 1100 h, I observed an adult female *T. c. carolina* in the vicinity of a railroad right-of-way with strongly curved hind-limb claws approximately 3 cm in length. This same turtle, identified by color pattern and minor damage on the carapace (Dodd 2001. *North American Box Turtles: A Natural History*. University of Oklahoma Press, Norman, Oklahoma. 231 pp.), was observed in the same general area again on 1 June 2017 and on 9 June 2018 and retained these exceptionally long, curved claws on the hindlimbs (i.e., these structures did not shorten over an approximately three-year period). The hindlimb claws of other male and female *T. c. carolina* observed in this population typically ranged from approximately 1 to 1.5 cm in length.

Terrapene c. carolina exhibits a number of dimorphic secondary sex characteristics; among these, males typically have longer and more curved claws on the hindlimbs than females (Ernst and Lovich 2009. *Turtles of the United States and Canada*,