

attracted to the baited pitfall trap. On the same day, a second *T. ornata* also was observed wedged underneath the wooden cover of another pitfall trap, 1.6 km east of the first observation (42.06578°N, 99.44150°W; WGS 84); this turtle may also have been attracted to potential insect prey, but this could not be confirmed.

Our observations represent the first documentation of the families Staphylinidae and Silphidae in the diet of *T. ornata*, with the turtle apparently being attracted to the insect activity at baited traps for carrion beetles. Beetles in the family Silphidae have been reported to be consumed by a number of lizard species, but not yet to our knowledge documented in the diet of any species of turtle (Young 2014. Coleopterists Bull. 68:221–234). Other vertebrates, including Northern Leopard Frogs (*Rana pipiens*) and Virginia Opossums (*Didelphis virginiana*), have been documented consuming carrion beetles, including the endangered American Burying Beetle (*Nicrophorus americanus*), at bait stations for *N. americanus* (Jurzenski and Hoback 2011. Coleopterists Bull. 65:88–90). *Nicrophorus americanus* is nocturnally active (Bedick et al. 1999. J. Insect Conserv. 3:171–181). In general, *T. ornata* is diurnal, though females can be nocturnal when nesting (Ernst and Lovich, *op. cit.*; Tucker et al. 2014. Am. Midl. Nat. 171:78–89; Tucker et al. 2015. Copeia 103:502–511). We have only observed *T. ornata* at a few (<1%) of hundreds of pitfall traps set to document burying beetles in the Sandhill Region of Nebraska. The nocturnal activity of *N. americanus* and diurnal foraging by *T. ornata* suggests that diurnal necrophagous insects may be likely prey, especially at vertebrate carrion, but nocturnal burying beetles, including *N. americanus*, are less likely to be eaten by these turtles.

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**TERRAPENE YUCATANA (Yucatan Box Turtle). COURTSHIP AND MATING BEHAVIOR.** *Terrapene yucatana* is a medium-sized box turtle that lives in the tropical dry forests of the Yucatan Peninsula in Mexico. There is apparently no published information on courtship or mating behavior of *T. yucatana* in the wild or in captivity, but it is assumed that these behaviors take place during the four to five-month wet season between July and November (Legler and Vogt 2013. The Turtles of Mexico. University of California Press, Berkeley, California. 326 pp.). In this note we provide the first observations of *T. yucatana* courtship behavior and mating in the wild.

During the 2018 wet season we observed courtship and mating behavior on four separate occasions near Xul, Yucatan, Mexico at a field station that is owned and operated by Kaxil Kiuic: The Millsaps Biocultural Reserve (20.08750°N, 89.55611°W; WGS 84). These observations took place at the start of a mark-recapture and radio telemetry study. Therefore, individuals mentioned here were marked with notches after the initial capture and two were equipped with radio transmitters when these observations occurred (females #2 and #9). The first observation occurred on 10 September 2018 at 0941 h when we observed male #7 and female #6 copulating (Fig. 1A), then on



FIG. 1. A) Male #7 and female #6 *T. yucatana* copulating at 0941 h on 10 September 2018. B) The female walked away after the observer approached, and the male remained on his back with his penis exposed until being captured for measurements.

13 September 2018 at 1549 h we observed male #17 and female #2 together but not copulating. On 22 October 2018 at 0959 h we observed male #17 mounting female #9 but not copulating, and on 12 November 2018 at 0741 h we observed male #17 and female #9 copulating. All of these observations occurred within 0.5 ha area of primary forest. The minimum distance between two observations was 5 m (13 September and 12 November) and the maximum distance was 126 m (10 September and 13 September). All three observations of male #17 occurred at the base of a hill within 65 meters of each other.

Courtship and mating behavior have been described in detail for *Terrapene carolina carolina* (Evans 1953. Herpetologica 9:189–192). Evans proposed that there are three sequences of courtship behavior in *T. c. carolina*. In the first phase, the male approaches within about 10cm of the female, both investigate each other, the

male begins circling, then the circling behavior can lead to the male biting, pushing, or dragging the female until she decides to mate or walk away. If the female decides to mate, the male mounts the female in the second phase and attempts to copulate. If the female is perceptive and relaxes her plastron for the male, then third phase begins when the male falls backward and inserts his penis. During the third phase the male appears to be laying on his carapace (Fig. 1A), which can last up to three hours.

Our observations in *T. yucatana* seem to coincide with each of the three phases described by Evans (*op. cit.*). Our second observation on 13 September 2018 may represent the first phase, in which the male initially approaches the female and no copulation occurs. It appears that we observed the second phase on 22 October 2018 when male #17 was mounting female #9 in the upright position with his rear claws inserted into the female's plastron and could not confirm if the male's penis was inserted. The third phase was observed on 10 September 2018 (Fig. 1A) and 12 November 2018 in which both males were completely on their backs, rear claws in the female's plastron, and insertion of the penis was confirmed (Fig. 1B).

These observations support the suggestion that courtship and mating behavior of *T. yucatana* occurs during the wet season from July to November and that it is similar to that of *T. c. carolina* (Legler and Vogt, *op. cit.*; Evans, *op. cit.*). This note represents the first published account of breeding behavior in *T. yucatana* and we stress the importance of future research for this poorly known species.

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#### CROCODYLIA — CROCODILIANS

**ALLIGATOR MISSISSIPPIENSIS (American Alligator). DIET.** American Alligators are opportunistic feeders, eating a variety of prey items of all classes of animals. In eastern Texas, a recent study indicates a large majority of their diet consists of invertebrates regardless of alligator size (Saalfeld et al. 2011. Southeast. Nat. 10:659–672). Herein we report an observation of a juvenile American Alligator predating the eggs of a Red-eared Slider (*Trachemys scripta elegans*) as they were being laid.



FIG. 1. Juvenile *Alligator mississippiensis* eating the eggs of *Trachemys scripta elegans* as they are laid.

On the morning of 24 April 2018 between 0900 and 1000 h, KA was hiking the Creekfield Lake Trail at Brazos Bend State Park, Fort Bend County, Texas, USA (29.37526°N, 95.59506°W, WGS 84; 0 m elev.) along the edge of the ca. 1.4-ha lake. She happened upon a young alligator, ca. 60 cm total length, positioned ca. 0.5 m behind the female turtle, ca. 30 cm carapace length. When the turtle began laying her eggs in a freshly excavated nest, the alligator approached and started devouring the eggs. KA took video recordings and still photographs documenting the alligator eating the turtle's eggs as they exited her cloaca (Fig. 1). Ultimately the alligator was observed consuming at least 4–5 eggs in this manner before moving away. It is unclear whether the turtle continued laying eggs after the incident, since KA continued hiking after the alligator departed.

To our knowledge this is the first documented occurrence of an American Alligator predating the eggs of any turtle species as they were being laid. We thank Travis LaDuc for reviewing this note.

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**CAIMAN YACARE (Yacare Caiman, Jacaré do Pantanal). TADPOLES IN DIET.** *Caiman yacare* is a large predator distributed in Bolivia, Paraguay, Argentina, and Brazil (Uetz et al. 2018. The Reptile Database; <http://www.reptile-database.org>, accessed 15 September 2018). It is an opportunistic predator, eating what is most abundant in its environment (Santos et al. 1996. Herpetol. J. 6:111–117). The diet of adults is dominated by fish, but also includes mammals, birds, and amphibians in minor proportions, while juveniles tend to consume more insects and smaller prey than adults (Santos et al., *op. cit.*). Here, I report an unusual event where a juvenile of *C. yacare* predated tadpoles of *Leptodactylus podicipinus*.

This observation occurred at Base de Estudos do Pantanal, Universidade Federal de Mato Grosso do Sul (19.5761°S, 57.0266°W; WGS 84), in the municipality of Corumbá, state of Mato Grosso do Sul, Brazil. During a field trip to record parental care of *Leptodactylus podicipinus*, I observed a juvenile *C. yacare* (SVL ca. 47 cm) feeding on a school of tadpoles at the edge of a temporary pond. After several minutes the mass of tadpoles separated and the caiman moved out to deeper waters. Later, when the predator left the area, the attending female *L. podicipinus* returned, and after a couple of minutes the tadpoles started to aggregate, although the size of the school was considerably smaller.

Female *L. podicipinus* guard the nest and tadpoles until completion of metamorphosis (Martins 2001. J. Herpetol. 34:135–139). Nest guarding may include aggressive behaviors toward predators (Prado et al. 2002. Copeia 2002:1128–1133). Although this type of parental care can be effective against bird or fish predators (Vaz-Ferreira and Gehrau 1974. Rev. Biol. Uru. 2:59–62), it will not deter predation by a caiman.

Ontogenetic changes in crocodilian diets are known for several species, including *C. yacare* (Santos et al., *op. cit.*; Platt et al. 2013. J. Herpetol. 47:1–10). Adult crocodilian predation of post-metamorphic anurans is well documented, although this is considered a minor component of their diets (e.g., Tucker et al. 1996. Copeia 1996:978–988). On the other hand, juvenile crocodiles preying on tadpoles is not well documented, as only one report of *C. yacare* preying on tadpoles of *Pseudis paradoxa* in temporary ponds is available (Santos et al., *op. cit.*). Notably, *P.*