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CHELONIA MYDAS (Green Sea Turtle). NESTING BEHAVIOR. In the United States, *Chelonia mydas* has been documented nesting on the East Coast (predominantly the Atlantic Coast of Florida), and along the Eastern and Western Gulf of Mexico in Florida and Texas (Seminoff et al. 2015. NOAA Tech. Mem. 571 pp.). Upon reaching maturity, *C. mydas* return to their natal beaches to nest, usually with high fidelity (Limpus 1992. Wildl. Res. 19:347–358). At 2340 h on 15 June 2011, staff from the Riverhead Foundation for Marine Research and Preservation responded to a report of an adult female *C. mydas* near Main Pavilion Dune Road on Ponquogue Beach in Hampton Bays, New York, USA. The turtle was observed returning to the water without nesting at 0044 h on 16 June 2011. The turtle measured 111.7 cm straight carapace length. An Inconel metal flipper tag was present in the front left flipper, which was matched to her original tag application during a non-nesting emergence on 27 June 2006, at 1835 h, at Padre Island National Seashore (PAIS), in Kleberg County, Texas, USA, when the turtle measured 115.2 cm curved carapace length. The same PAIS biologist that observed the non-nesting emergence also observed this female nesting on 28 June 2006, at 0715 h, at PAIS, 12.0 km north of the non-nesting emergence location. From 177 eggs laid at that event, 67 eggs hatched (37.9%) and 67 hatchlings emerged and were released on the beach at PAIS and entered the Gulf of Mexico.

In 2011, this female was documented nesting in Delaware where she laid 194 eggs. A Cape Henlopen State Park Ranger discovered the nesting turtle around 0300 h on 18 August 2011. Although tags were not recorded at the Delaware nesting event, this turtle was identified as the same individual based on DNA analysis and photos taken at those events using the facial scale pattern unique to the individual (Fig. 1; Carpentier et al. 2016. J. Exp. Mar. Biol. Ecol. 476:15–21). Parentage analysis using eight microsatellite loci (CcP1B03, CcP1F04, CcP1G02, CcP2H12, CcP5F01, CcP5H07, CcP7B07, CcP7E11; Shamblin et al. 2007. Mol. Ecol. Notes 7:784–787) and mitogenomic sequencing (Shamblin et al. 2012. Mol. Ecol. 21:2330–2340) with a combined first-parent exclusion probability of 0.9998, confirmed a mother-offspring relationship between a maternal skin sample collected from the nesting female at PAIS in 2006 and a dead embryo collected from the Delaware nest. This female was excluded as laying any of the nine North Carolina clutches sampled for genetics in 2011 (Shamblin et al. 2018. Chelon. Conserv. Biol. 17:314–319). The Marine Education, Research and Rehabilitation Institute partnered with the University of Delaware College of Marine Studies and the Delaware Department of Natural Resources and Environmental Control to protect the clutch in Delaware through the incubation period. Eight hatchlings emerged 4–7 December 2011 and were taken to the North

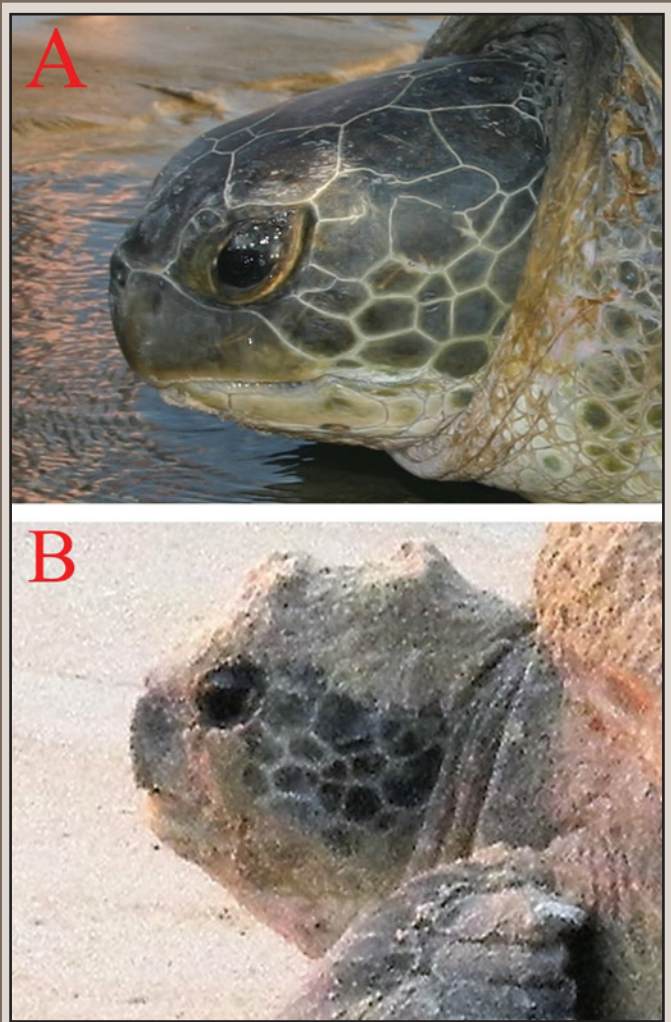


FIG. 1. The unique facial scale pattern used to identify the *Chelonia mydas* (Green Sea Turtle) individual observed nesting in Texas (A) and Delaware (B).

Carolina Aquarium at Pine Knoll Shores for care, where seven survived. The remaining unhatched eggs were transferred to the North Carolina State University Center for Marine Sciences and Technology for additional incubation; seven additional hatchlings emerged from these eggs, but only one survived. The eight hatchlings that survived from this clutch were released into the Gulf Stream. This is the first *C. mydas* confirmed to have nested both on the Texas Gulf Coast and the North Atlantic Coast of the United States. This is also the first record of *C. mydas* nesting in Delaware and the second *C. mydas* observed attempting to nest in New York. The first was a female observed during a non-nesting emergence in 1998; based on examination of facial scale patterns, this was not the same individual as was observed in 2011.

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CHELYDRA SERPENTINA (Snapping Turtle). **MORTALITY.** Entanglement or entrapment by anthropogenic debris may be an occasional source of turtle mortality (Plotkin and Amos 1988. *In* Schroeder [ed.], *Proceedings of the Eighth Annual Workshop on Sea Turtle Biology and Conservation*, pp 79–82. NOAA Technical Memorandum NMFS-SEFC-214, Forth Fisher, South Carolina; Triessnig et al. 2012. *Chelon. Conserv. Biol.* 11:68–77). This has been well-documented in sea turtles (e.g., Plotkin and Amos 1988, *op. cit.*; Triessnig et al. 2012, *op. cit.*), but may also occasionally cause mortality of freshwater turtles. Herein, I report a novel observation of an adult *Chelydra serpentina* which appeared to have become entrapped and died within a partially-submerged, discarded rubber tire. On 3 July 2019 at 1048 h, I observed a deceased *C. serpentina*, ca. 30 cm straight-line carapace length, within a small cove of Lake Chillisquaque, Montour County, Pennsylvania, USA (41.10707°N, 76.66468°W; WGS 84). The turtle's carapace was stuck within the opening of a partially submerged tire, ca. 10 m from the lake's shoreline (Fig. 1). Presumably, the turtle ascended the tire to bask, subsequently became entrapped within the tire opening, and eventually expired. Because the turtle's carapace was roughly the same diameter of the tire opening, turtles of larger or smaller sizes may not have become entrapped as easily. However, this observation appears to be unique and may suggest entrapment within discarded tires could be a minor source of mortality within some turtle populations.



FIG. 1. Deceased *Chelydra serpentina* within a discarded tire.

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CHRYSEMYS PICTA (Painted Turtle). **MORTALITY.** On 10 June 2019 at 1450 h, I observed a deceased adult female *Chrysemys picta* within gravel substrate ca. 4 m from the shoreline of an unnamed pond within Scott Township, Columbia County, Pennsylvania, USA (41.00918°N, 76.41994°W; WGS 84). The deceased turtle was observed oriented in a unique and atypical position, with its anterior end positioned vertically upright and its right hind limb and



FIG. 1. Deceased *Chrysemys picta* as found in an unusual orientation.

right lower quarter of its shell entrapped within a small hole (Fig. 1). The turtle appeared to be desiccated and its limbs and head were retracted into its shell.

Although the turtle's cause of death is unknown, several potential scenarios may be plausible in which this deceased turtle may have arrived at this atypical position. Turtles are subject to a wide-variety of potential hazards, such as predation, disease, road mortality, collection for food or other means, entrapment by anthropogenic structures or debris, and even by natural sources of entrapment (Gibbs and Shriver 2002. *Conserv. Biol.* 16:1647–1652; Kornilev et al. 2006. *Herpetol. Rev.* 37:145–148; Ernst and Lovich 2009. *Turtles of the United States and Canada*. Second edition. Johns Hopkins University Press, Baltimore, Maryland. 840 pp.; Nickerson and Pitt 2012. *Bull. Florida Mus. Nat. Hist.* 51:257–267; Triessnig et al. 2012. *Chelon. Cons. Biol.* 11:68–77; Franklin 2015. *Herpetol. Rev.* 46:246; Currylow et al. 2015. *Herpetol. Notes* 8:485–487). One possibility is that the turtle may have succumbed to natural entrapment by means of becoming stuck within the small hole in which it protruded from (Fig. 1). Turtles can occasionally become entrapped within natural structures such as crevices and may eventually expire from dehydration/heat stress (Wilson and Topham 2009. *Herpetol. Rev.* 40:335–336; Currylow et al. 2015, *op. cit.*). After observing the dead turtle in its original position, I removed it from the small hole and observed that it was slightly “secured” by dried substrate within the hole. However, this substrate may have dried following the death of the turtle, and the possibility that the turtle would not have been able to free itself if trapped while alive appears to be unlikely due to the orientation in which the turtle was found (Fig. 1).

An alternative possibility is that this turtle may have died prior to arriving at the unusual orientation and was moved into this position by another organism. Due to the fact that no obvious signs of predation (e.g., gnaw marks or injuries) were observed on the dead turtle, it is unlikely to have succumbed to predation. However, it plausibly could have become entrapped between the rails of an adjacent railroad track and expired (e.g., Kornilev et al. 2006, *op. cit.*; Heske 2015. *Urban Nat.* 4:1–13), which has been observed in *C. picta* and other turtle species at this location (SMH, pers. obs.). A scavenger such as a North American Raccoon (*Procyon lotor*) may have then moved the turtle into this unusual orientation while attempting to obtain the soft parts the carcass (i.e., limbs, head) that were retracted into the shell.