

4.2 kg. Upon recapture in Texas on 18 January 2007, the living tag was not observed until barnacles that covered it were removed. The *C. mydas* measured 48.1 cm CCL, 43.4 cm CCW, and 13.3 kg, documenting ca. 14.4 cm CCL, 15.1 cm CCW, and 9.1 kg of growth over the 534 days between release from Xcaret Park in 2005 and recapture by STI in 2007. On 21 February 2007, the rehabilitated *C. mydas* was released into the lower Laguna Madre near Port Isabel. A PIT tag and two Inconel tags were applied before release. There was negligible growth while in rehabilitation in Texas.

On 4 February 2011, a live juvenile *C. mydas* was found hypothermic stunned in the Gulf Intracoastal Waterway in the upper Laguna Madre near Corpus Christi, Nueces County, Texas. At recovery, the *C. mydas* measured 62.2 cm CCL, 52.5 cm CCW, and ca. 25 kg. The *C. mydas* was rehabilitated at the ARK, given a PIT tag (#4A685D0172), and released into the upper Laguna Madre on 15 March 2011. The *C. mydas* was found stranded on 6 October 2011, offshore of Veracruz 205 days later (Shaver et al. 2017. *op. cit.*) and was identified as the *C. mydas* released in Texas based on a PIT tag (#4A685D0172). The size of the *C. mydas* at recovery is not available. The *C. mydas* was transported to the Veracruz Aquarium for rehabilitation and was released into GoM waters offshore from Veracruz on 9 October 2011. At release after this second rehabilitation, the *C. mydas* measured 66.5 cm SCL, 56.5 cm SCW, and 35 kg.

This is the first record of a *C. mydas* marked with a living tag in Quintana Roo, Mexico, recaptured in Texas, and the only two records of *C. mydas* tagged in Texas and recaptured in Veracruz, Mexico. These three mark-recapture records underscore the importance of continued international partnership for the recovery of the threatened western GoM *C. mydas* stock.

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CHELONIA MYDAS (Green Sea Turtle). INCIDENTAL CAPTURE. Drifting fish aggregating devices (dFADs) are manmade floating structures used in the purse seine fishing industry to capture

schools of pelagic fish. dFADs consist of a floating raft, plastic mesh webbing, and a satellite-tracking buoy that enables fishing vessels to locate and collect these devices. The PEW charitable Trust Report estimated that as many as 121,000 dFADs were left adrift in 2013 (Gershman et al. 2015. PEW Environ. Group). These unrecovered dFADs become ghost fishing gear and pose a significant threat to sea turtles by entanglement and risk of ingestion. The entanglement of sea turtle species in dFADs has been documented in the Indian, Atlantic, and Pacific Oceans (Hall et al. 2013. FAO Fish. Rep. 568:179–189), as well as the Mediterranean (Blasi et al. 2016. Herpetol. Con. Bio. 11:386–401), but not in the Gulf of Mexico prior to this report.

On 29 June 2019, Padre Island National Seashore (PAIS) staff arrived at the campsite of a visitor who found two stranded *Chelonia mydas* entangled in a dFAD at the PAIS 57.9 km marker, on North Padre Island, Kenedy County, Texas, USA (26.90130°N, 97.36970°W; WGS 84). The raft portion of the dFAD, constructed



FIG. 1. The dFAD and stranded Green Sea Turtles found washed ashore at Padre Island National Seashore, Kenedy County, Texas, USA on 29 June 2019.

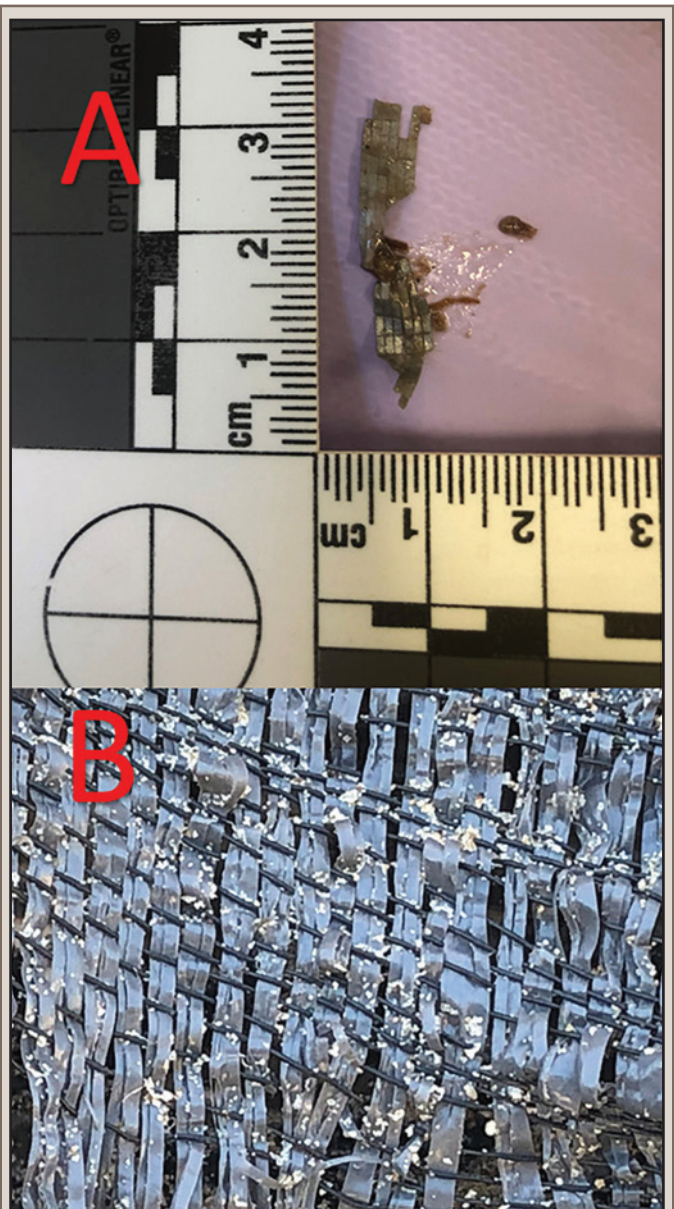


FIG. 2. The dFAD netting found in the contents of one turtle's stomach (A) and on the dFAD (B).

with metal tubing and held afloat by empty gray plastic jugs, was all that remained of the original structure. The stranded turtles had been entangled in the mesh of the dFAD raft; however, earlier that day, prior to the arrival of PAIS staff, the visitors removed the turtles from the dFAD in an attempt to save them. Upon arrival on scene, staff concluded that both turtles were deceased (Fig. 1). One turtle measured 24.2 cm straight carapace length (SCL) and the second measured 25.8 cm SCL.

The two turtles were necropsied at PAIS on 10 July 2019. Both turtles had adequate fat stores, were well muscled, and were not yet showing signs of decomposition. The first turtle was male; bloody fluid and beach sediment were located in the mouth, esophagus, lungs, and trachea. The second turtle was female; beach sediment completely obstructed the trachea, bloody fluid and sediment were found within the lungs, and a 3.0 × 0.5 cm piece of woven plastic that matched the dFAD netting was found in its stomach (Fig. 2). These findings suggest that forced submergence as a result of entanglement within the dFAD is the likely cause of death for both turtles. Given the post-mortem condition of the turtles, it is likely that they became entangled recently in the dFAD close to shore. Other than the frame, the plastic mesh webbing, and the plastic bottles that held it afloat, the remainder of the dFAD had largely disintegrated. It is likely that the dFAD remained afloat for weeks or months, and only entangled the turtles as it neared the shore where it beached. Because it had been separated from the buoy used to track it, it is impossible to trace the dFAD back to its origin. This is the first record of a sea turtle fatality resulting from a dFAD entanglement in the Gulf of Mexico. PAIS staff conducted all activities under Texas Parks and Wildlife Department Scientific Permit SPR-0190-122 and U.S. Fish and Wildlife Service Endangered Species Permit TE-840727.

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CHELONIA MYDAS (Green Sea Turtle). REPRODUCTIVE ABNORMALITY. Cheloniidae nesting success can be compromised by reproductive abnormalities including oviductal prolapse, yolk embolism, yolk coelomitis, retained eggs, ectopic eggs, and dystocia (Manire et al. 2017. Sea Turtle Health and Rehabilitation. J. Ross Publishing, Plantation, Florida. 1010 pp.). Prolapse of the oviducts has been documented in nesting *Caretta caretta* and *Lepidochelys olivacea* (Nutter et al. 2000. Vet. Rec. 146:78–80; Frutche et al. 2002. In Seminoff [ed.], NOAA Technical Memorandum NMFS-SEFSC-503; Saracho et al. 2013. In Tucker et al. [eds.], NOAA Technical Memorandum NMFS-SEFSC-645). Cheloniidae that are not surgically treated for oviductal prolapse are at risk of yolk coelomitis and subsequent secondary bacterial infection (Manire et al. 2017, *op. cit.*). Herein, we report the first documentation of a *Chelonia mydas* expelling a prolapsed oviduct on the western Gulf of Mexico coast.

At 0012 h on 26 August 2019, staff from Padre Island National Seashore (PAIS) documented a nesting *C. mydas* near the PAIS 66 km beach marker in Kenedy County, Texas, USA. A passive integrated transponder (PIT) tag (Biomark, Boise, Idaho, USA) was present in the left front flipper and two Inconel metal tags (National Band and Tag Company, Newport, Kentucky, USA) were present in the left front and rear flippers. These tags were matched to her original tag application during a non-nesting emergence near the PAIS 55 km beach marker in Kenedy

County, Texas on 24 August 2019, where she measured 108.6 cm straight-line carapace length. On 26 August 2019, the female was discovered while digging an egg cavity. During egg deposition, PAIS staff observed soft tissue expelling from the cloaca. Once the female returned to the Gulf of Mexico, the nest was excavated and 91 eggs were recovered, including 73 eggs normal in appearance, 17 eggs with small tendrils, and one conjoined egg. Additionally, six shredded egg fragments (range: 6.05–14.65 cm length) and the expelled soft tissue were present in the nest chamber. PAIS staff excavated and relocated the *C. mydas* clutch for protected incubation.

At 0904 h on 12 September 2019, PAIS staff discovered a *C. mydas* carcass near the PAIS 56 km beach marker in Kenedy County, Texas, USA. A PIT tag and two Inconel metal tags were present, which identified the carcass as the female observed nesting on 26 August 2019. Necropsy findings indicated the *C. mydas* was well-muscled with adequate fat stores and had no external trauma. The contents of the *C. mydas* gastrointestinal tract were removed for examination, and weighed wet. The stomach and esophagus contained beach sediment and 0.4 kg of *Sargassum* spp., as well as small amounts of *Dictyota menstrualis*. The small intestine contained only trace amounts of digesta while the large intestine contained 0.8 kg of digesta. Trace amounts of plastics and terrestrial plant matter were found throughout the gastrointestinal tract.

Copious froth was present throughout all aspects of the respiratory system. The serosal surfaces of the liver, the gastrointestinal tract, and oviducts were coated in thick fibrin. Coagulated blood was present in the ventricle and severe coelomitis was documented throughout the coelom. The left and right ovaries contained numerous vitellogenic follicles. Coelomitis originated and was thickest around the left oviduct and coagulated blood was found at a complete tear in the left oviduct. The distal and proximal portions of the left oviduct contained a total of 14 shelled eggs. The distal portion of the left oviduct was prolapsed into the cloaca where shelled eggs and feces formed an impaction.

The presence of digesta in the gastrointestinal tract corroborates that *C. mydas* may feed in interinteresting habitats (Tucker and Read 2001. J. Herpetol. 35:500–503). The cause of death was attributed to complications during oviposition on 26 August 2019. The left oviduct prolapsed, detached, and was observed expelling from the vent during egg deposition. Eversion of the expelled fragment confirmed prolapse. The remaining fragments of the left oviduct within the coelom induced a severe infection, which weakened the female, and resulted in the *C. mydas* drowning. After 49 days of incubation, the clutch was excavated for analysis. All eggs were unhatched and undeveloped. Most eggs had abnormalities including calcium tendrils, calcium deposits, and thin, flaking shells. This note documents the first observation of a nesting *C. mydas* expelling a prolapsed oviduct on the western Gulf of Mexico coast.

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CHRYSEMYS DORSALIS (Southern Painted Turtle) and TRACHEMYS SCRIPTA ELEGANS (Red-Eared Slider). SYMBIOSIS and BEHAVIOR. Symbiotic interactions have infrequently been observed between two turtle species, with only one published account of a possible cleaning symbiosis between