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Foraging by a Gravid Green Turtle During the Internesting Interval in Guadeloupe, French West Indies

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A female green turtle (*Chelonia mydas*) was found dead stranded on the outskirts of the town of Gosier, on the southern end of the island of Grande-Terre in Guadeloupe, French West Indies (16.205122, -61.49564), on 01 November 2009. The carcass appeared to be 3-4 days post-mortem, thus we extrapolated date of death being 28-29 October 2009. The turtle measured 111.5 cm curved carapace length and 101 cm curved carapace width, and bore an inconel tag on the trailing edge of each of her front flippers (Numbers FWI 3079/FWI 2659) that had been placed there on 20 August 2008 by volunteers patrolling Les Galets beach on the island of Marie Galante, about 40 km southeast from where the stranding was observed. After being tagged, this turtle was observed nesting again on 01 September and 14 September 2008, on the same nesting beach. A 12-13 day internesting interval is common to other green turtle nesting sites (Miller 1997).

We necropsied the turtle, but found no gross signs of injury, lesion or illness. Her body condition was good, and her gastro-intestinal tract was full of sea grasses, primarily *Syringodium filiforme*, which is a primary food source for green turtles (Mortimer 1981, 1982). Given that she appeared healthy and was eating just prior to death, we assume that the cause of death was drowning due to accidental capture in a submerged fishing net. Each year, incidental capture in

fishing gear in Guadeloupe causes the death of 800 – 1000 marine turtles (Delcroix unpub data).

This turtle also had 30-40 unshelled eggs in her oviduct, which suggests that she had been foraging during the nesting season. These unshelled eggs likely would have been part of a final nest that she would have laid, although it is also possible that the eggs may have been in the process of being resorbed. Green turtles can lay between 1 and 8 nests in a single nesting season (Alvarado-Diaz et al. 2003), and in the case of the stranded green turtle, if her first nest was indeed 20 August and she maintained a 12-13 days internesting interval, the eggs remaining in the turtle's oviduct may represent the 6th or 7th nest of the season. Also, green turtles are commonly observed to migrate long distances between nesting and foraging grounds (Solé 1994, Hirth 1997, Harrision 2006). This has also been the case for post-nesting green turtles tracked using satellite tags: two green turtles from Les Galets beach moved between 144 and 200 km at the end of the nesting season (Delcroix et al. 2008). This stranded green turtle was found <40 km from its nesting beach, and possibly died even closer but floated away during the 3-4 days before it was found.

The question of foraging by green turtles during the nesting season remains unresolved. In Ascension Island, Hays et al. (2002) found

no evidence of foraging by gravid females, while in Raine Island, Tucker and Read (2001) found that >40% of examined green turtles with developing follicles also had food in their digestive tracts. Balazs (1980) reported that both reproductive males and female green turtles were foraging during the breeding season in French Frigate Shoals, Hawaii, and suggested that breeding green turtles in other rookeries had not been observed foraging because of a lack of available food sources near the nesting beaches. In the case of Guadeloupe, there are numerous seagrass beds available for foraging by breeding green turtles during the nesting season. Thus, it may be the case that green turtles in Guadeloupe commonly consume seagrasses during the internesting interval. However, should this be the case, it does raise the question of why post-nesting females would migrate to other islands in the Caribbean after the nesting season rather than settle in nearby abundant seagrass beds near their nesting beaches.

Acknowledgements: We thank all the members of the Réseau Tortues Marines Guadeloupe for their continued investment in the conservation of marine turtles in Guadeloupe. Financial support for the program come from DIREN Guadeloupe and the Conseil Régional Guadeloupe.

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A Leatherback Turtle Encountered in El Nido, Palawan, Philippines

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A leatherback turtle (*Dermochelys coriacea*) was caught entangled in a drift net, locally called “pamo,” in Dipnay Bay, San Fernando, El Nido, Palawan, Philippines (11.322517° N, 119.562667° E) on 19 November 2005. The local fisher folks found a harness, which seemed too tight for the large turtle, across the leatherback’s body, and some of the harness appeared already embedded in the turtle’s flesh. Fearing the survival of the leatherback, the locals removed the harness, as well as the small rectangular box/gadget found on top of the turtle. The fisher folks and local officials eventually released the turtle back in the sea, only to find it dead after three days, along the same coast on November 22, 2005.

Examination of the carcass revealed that the turtle had fresh wounds on the shoulder and base of the fore flippers which could have been caused by the tight harness. The leatherback turtle, locally called “balimbingon,” had a curved carapace length of 201 cm and a curved carapace width of 158 cm. Because of the remoteness of the area and because the local community was not familiar with the conduct of a post-mortem examination of a marine turtle, they decided to simply bury the turtle.

Meanwhile, the local fisher folks who acquired the small box broke it into small pieces thinking there was gold or something profitable in it. Not finding anything beneficial, they threw it away.