

Link Between Green Turtles Foraging in Brazil and Nesting in Costa Rica?

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The largest known foraging and nesting populations of green turtles (*Chelonia mydas*) in the Atlantic are found along the Caribbean coasts of Nicaragua and Costa Rica (Bjorndal et al. 1999, Hirth 1997). A recent analysis of male and female individuals from the foraging grounds in Nicaragua found that the majority of individuals came from the nearby nesting grounds of Tortuguero, Costa Rica with a small percentage coming from the Suriname nesting populations (Bass et al. 1998). Nesting females from Ascension and Suriname largely forage in waters off of Northeastern Brazil (Carr 1975; Pritchard 1976), hence one may expect to find relatively low-level exchange between these southern populations and that of Tortuguero. This was recently confirmed by a tag return of an individual turtle tagged on the Brazilian feeding grounds and later recaptured in Nicaraguan waters (Lima et al. 1999). Here we present data on a tag return of an adult green turtle that moved in the opposite direction: from Tortuguero to Brazil. On 7 February 2001, a dead green turtle in the early stages of decomposition was found on the beach of Goiabeiras located in the municipality of Fortaleza, Ceará (3° 43' S, 38° 32' W). An external inspection revealed several perforations in the neck from different fishing hooks. The turtle had two external inconel tags, bearing the numbers 83028 and 83029, attached to the front flippers, and it measured 107 cm in curved carapace length (CCL) and 93cm in curved carapace width (max). This turtle had been originally tagged on the nesting beach of Tortuguero (10° 35' N, 83° 31' W to 10° 21' N, 83° 23' W) on 25 March 1999, and at that time had a CCL of 106 cm. This individual was seen during nesting events on 7 and 20 April of the same year, but was never seen on the beach again after this date. The minimum distance traveled by the turtle between Tortuguero and Brazil was approximately 5000 km. We suggest that genetic studies, satellite telemetry, and capture-mark-recapture programmes be integrated together to provide information on the origin and behavior of sea turtles in foraging areas such as Ceará, Brazil.

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