

Nevis Hawksbill Project

NEW TRACKING PROJECT PROVIDES INTERESTING DATA ON MIGRATORY BEHAVIOUR AND HABITAT USE OF EASTERN CARIBBEAN HAWKSBILL TURTLES.

Authors

Emma Harrison¹

Dan Evans²

Emile Lemuel Pemberton³

David Godfrey²

Author affiliations

¹ Caribbean Conservation Corporation, Apdo Postal 246-2050, San Pedro, Costa Rica

² Caribbean Conservation Corporation, 4424 NW 13th St., Suite B-11, Gainesville, FL 32609, USA

³ Nevis Turtle Group, Department of Fisheries, Nevis

Abstract

In August 2006, the Caribbean Conservation Corporation (CCC) formed a partnership with the Nevis Turtle Group and the Four Seasons Resort Nevis to establish a research and conservation project to study the migration patterns of "critically endangered" hawksbill sea turtles (*Eretmochelys imbricata*) nesting on the Caribbean island of Nevis in the West Indies. The objective of the project is to reveal important information about the hawksbill's migratory behavior. The results will help both conservationists and natural resource managers improve protection efforts for this endangered species within the wider Caribbean.

Despite threats such as habitat degradation from coastal development, illegal take of nesting females and eggs, and a seasonal turtle fishery in St Kitts & Nevis, Nevis manages to retain a significant population of nesting hawksbill turtles. Nesting density can reach 200 nests annually, and the Nevis Turtle Group reports an increase in nesting activity since their monitoring efforts began in 2001. These residual island populations are of particular investigative worth, for they may be critical to the continued survival of hawksbills in the region.

In 2006 and 2007 CCC researchers joined volunteers from the Nevis Turtle Group and the Four Seasons Resort Nevis to look for hawksbill turtles on the northwestern nesting beaches of the island. Using the protocol of Schroeder, Balazs and Rogers (1998), Telonics and Sirtrack satellite transmitters were attached to adult females. To date four individuals have been satellite tagged and tracked through the program.

In 2006, the two turtles that were tracked showed very disparate migration behavior. Following her release, one turtle traveled over 2,500 cumulative kilometers to the Miskito Coast of Nicaragua, where she has remained for the last 10 months. The other female stayed close to her release site, traveling over 900 cumulative kilometers around the neighboring islands, but always remaining within 100 km of her nesting beach.

It is still too early to determine where the two females satellite tagged in 2007 will travel. Preliminary data show that one is heading southeast away from Nevis, in the opposite direction

28th Annual Symposium on Sea Turtle Biology and Conservation

of either turtle from 2006. The second turtle from 2007, however, remains just a few kilometers off-shore from the nesting beach, in the shallow-water channel between Nevis and St Kitts, possibly utilizing an inter-nesting habitat until she completes her nesting season.

Data from just the first year of this project have been extremely enlightening. First, they reveal the extensive migrations being conducted by hawksbills nesting in the Eastern Caribbean. Second, they provide further proof that Nicaragua's Miskito Cays are important foraging grounds for hawksbills from various rookeries throughout the wider Caribbean, supporting evidence from previous hawksbill satellite tracking projects conducted by CCC and Drs. Peter and Anne Meylan, in Costa Rica and Panama. Such findings will ultimately strengthen the case of turtle conservationists working to develop regional strategies aimed at improving protection and enforcement in these vital turtle feeding habitats. Hopefully the results from 2007 will further broaden our knowledge of the migratory behavior of Eastern Caribbean hawksbill turtles.