

Migration routes and dive patterns of post-nesting hawksbills from the Pearl Cays, Nicaragua

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Four post-nesting hawksbills were satellite tracked from the Pearl Cays, Nicaragua in 2000 and 2001. In addition to identifying resident foraging sites and migration routes we were also interested in characterizing dive patterns and using the opportunity to raise awareness and educate Nicaraguans about sea turtles. More than 80 local, regional, and central government personnel, coastal community leaders and local fishers; and students and teachers from a nearby school participated in the two satellite deployment events. Prior to the release of each turtle, participants named the female and a small paper flag of Nicaragua was attached to the shell. We found this to be an excellent opportunity to increase the public's awareness and interest in sea turtle biology and conservation issues.

All four turtles traveled in a northeasterly direction from the Pearl Cays. Three of the turtles settled in the same general vicinity in the offshore waters of central Nicaragua. The fourth turtle migrated farther to the northeast and settled on the edge of the continental shelf, east of the Nicaragua/Honduras border. Distances and average daily speeds traveled were presented, as well as comparisons between dive durations in-transit versus at the resident foraging site, and diurnal versus nocturnal dive durations at the resident foraging site.

Results from these satellite tracked hawksbills show that Nicaragua's Caribbean coastal waters harbor critical foraging habitat for the Pearl Cays rookery, and possibly for other rookeries in the region. In addition, there is a distinct migratory route used by at least part of this population. Thus, disturbance or destruction of foraging habitat from activities such as oil exploration and extraction, and lobster divers could have detrimental effects to the Pearl Cays population, probably the largest remaining hawksbill rookery in the central-western Caribbean.

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