

NEST DISGUIISING AS AN IN SITU PROTECTION TECHNIQUE AGAINST SEA TURTLE NEST POACHING IN PLAYA NORTE, COSTA RICA

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Playa Norte is located to the north of the largest green sea turtle (*Chelonia mydas*) rookery in the Atlantic basin: Tortuguero, Costa Rica. Poaching is one of the main threats to the survival of the four species of sea turtles it hosts (*Dermochelys coriacea*, *Chelonia mydas*, *Eretmochelys imbricata* and *Caretta caretta*). Different sea turtle management and conservation manuals propose nest disguising as one of the techniques that can be applied to reduce the number of poached nests. In Playa Norte, this technique helped to reduce the number of poached nests since its implementation in 2006, from 159 (51.96%) green nests poached that year to 39 (23.21%) in 2009. The Sea Turtle Monitoring and Tagging Program of the Caño Palma Biological Station has applied this methodology for over ten years, therefore, it was relevant to evaluate the performance of this technique and dismiss possible counterproductive effects on the hatchling development of the disguised nests. We analyzed nest data from the past seven years (2010 – 2016) from Playa Norte and Tortuguero, neighboring beaches where the same nest marking and excavation methodologies are used, the only difference being the use of the nest disguising technique. We compared the averages of hatching and emergence success using a T student test. The analysis of more than 800 nests showed no significant difference between treatments. Hence, the nest disguising technique represents a viable option for sea turtle conservation projects to reduce poaching rates in nesting beaches when they lack resources to apply one of the other techniques used, such as hatcheries or nest relocations, and avoids some of the common problems these techniques have exhibited. Even though our study shows the technique is not harmful for the amount of hatchlings produced, more studies are necessary to determine if the quality of these hatchlings is also not being affected (sex ratios, deformities, etc.).