

righting response time, crawl speed, change in crawl speed, and overall swim activity, with hatchlings incubated at 27°C showing decreased locomotor abilities. No hatchlings survived when incubated at 32°C and above. Differences in survivorship of hatchlings incubated at high temperatures are important in light of projected higher sand temperatures due to climate change, and could indicate increased mortality from incubation temperature effects. Acknowledgements: We would like to thank the PADI Foundation, Lerner Gray Memorial Fund, Slocum Lunz Foundation, and the Charleston Scientific and Cultural Society for supporting this research. The help and cooperation of the SC Department of Natural Resources staff and volunteers is greatly appreciated, including Dubose Griffin and the SC-DNR Sea Turtle program staff, Jamie Dozier and SC-DNR Yawkey Wildlife Center staff, and the North Island Sea Turtle Project Team.

PRELIMINARY DATA ON THE OLIVE RIDLEY TAGGING PROGRAM AT NANCITE BEACH, COSTA RICA

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The olive ridley sea turtle exhibits two nesting strategies at Nancite Beach, Costa Rica: arribada nesting (mass synchronized nesting) and solitary nesting. Most studies have focused on the phenomenon of arribada nesting because of the impressive volume of nesting individuals involved, neglecting the less abundant solitary nesting behavior. During the peak nesting seasons of 2010-2013 we studied the internesting intervals and the post-nesting movements of olive ridley females utilizing both nesting strategies. A total of 2,902 turtles were tagged and 445 were recaptured. One hundred and forty one of the 445 recaptures were observed nesting solitarily and during arribadas. The observed overall internesting interval was 30.02 days (SD= 12.50), similar to previously reported data for this population. Additionally, we observed only 17 turtles that laid 3 clutches during the same season, which had not been reported for arribada beaches. We also observed a total of 78 females that nested during two consecutive seasons, exhibiting a remigration period of 348.26 days (SD= 34.88), which suggests that at least part of the population nests annually. Finally, we observed a total of 7 turtles that nested on multiple beaches in the region, including beaches such as Naranjo, Junquillal and Ostional, all of them located south of Nancite Beach. Our results demonstrate that olive ridley females exhibit both solitary and arribada nesting behaviors. This strongly suggests that all olive ridleys have the ability to sense the environmental cues that trigger the phenomenon of arribada. However, our results must be approached with caution given that it is not possible to verify the nesting of every turtle during the arribadas due to the large number of individuals involved. Furthermore, we do not know the level of site fidelity for the Nancite turtles, which might bias our conclusions. Finally, our data demonstrate the importance of including solitary nesting females, as their lower numbers may help us reveal nesting behaviors that would otherwise be missed by arribada-specific tagging programs.



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