

DESCRIPTION OF FIBROPAPILLOMATOSIS IN OLIVE RIDLEY (*Lepidochelys olivacea*) NESTING TURTLES IN THE SOUTHERN OF THE NICOYA PENINSULA, COSTA RICA.

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Since the 1930s the fibropapillomatosis disease has been documented in Green turtles (*Chelonia mydas*). This infectious disease is characterized by cutaneous fibroepithelial tumors that affect the soft tissues such as neck, armpits, fins, tail and around the eyes and destroy the hard tissues. The disease is mostly associated with a herpesvirus, but the role of this agent as a cause has not been completely clarified. In Costa Rica, the first cases on Olive Ridley were reported in Ostional National Wildlife Refuge during an arribada, in 1987. Since then the presence of this disease in Ostional has risen. Considering this increase and the contagious nature of the fibropapilloma, it is essential to evaluate its presence on this species in the rest of the Pacific of Costa Rica. The aim of this study is to describe fibropapilloma cases found in Olive Ridley nesting turtles in the Southern Nicoya Peninsula, Costa Rica. The Rescue Center for Endangered Marine Species (CREMA) runs four nesting projects in this area; Costa de Oro, San Miguel, Bejuco and Corozalito, being this last one a small arribada beach. When a sea turtle is encountered during CREMA's surveys the research team collects the corresponding data, which involves a thorough body check, if any sign of fibropapilloma is detected it is photographed and recorded including the affected area and the size of the sprouts. The data in this study presents all the records of fibropapilloma found on these 4 beaches during the seasons 2018-2019. A total of 19 affected turtles were recorded; 12 in 2018 and 7 in 2019. All the records found in 2018 were collected in Corozalito, 8 during arribada nesting events and 4 in solitary events. In addition, one of the registered turtles during 2018 re-nested that same year; the first time she presented a protuberance in the neck of 3cm, the next month she was spotted with the pre-existing protuberance now of 4cm and a new one of 1cm. From the documented cases of 2019, 1 occurred in Costa de Oro, 2 in San Miguel and 4 in Corozalito, 3 during arribada nesting events and 1 in solitary. For both seasons, the only affected body parts were the flippers and neck. The affected turtles showed an average of 3.4 (range 1-9) protuberances, and the average size of the bulges was 3.4 (range 1-8cm). As it was expected there were more records of affected turtles during the arribadas, which may be due to the concentration of specimens and a more efficient detection effort. The results agree with previous studies as most affected areas were the soft tissue body parts. Although the number of cases shown in this study may seem low and the present protuberances small, it is essential to keep investigating this disease and its presence, since it is estimated that a very high percentage of the affected sea turtles end up dying and more cases are found in which the disease develops in a very small temporal space.