

# **Characterization of the nesting area of the river crocodile (*Crocodylus acutus*) in the estuarine system Boca Negra-Boca de Tomates in the Municipality of Puerto Vallarta, Jalisco, Mexico**

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Abstract: Nesting is one of the periods of the crocodile's reproductive cycle that has the greatest impact on the survival of the species. The objective of this work was to characterize the American crocodile (*Crocodylus acutus*) nesting zone in the estuarine system Boca Negra-Boca de Tomates in Puerto Vallarta, Jalisco, Mexico in the year 2019. Eleven nests were registered distributed in two points (“sand area” with 9 nests, and “airport area” with 2 nests) in an area of 867 m<sup>2</sup>. The field records included coordinates, external measurements (distance from the center of the nest to the nearest tree and the nearest water's edge), and internal measurements from the nest (depth of the nest from top, depth and width of the incubation chamber). The 2019 data was compared with the latest nesting studies in Boca Negra and el Salado estuarines in 2012. This comparison of results gives us data on the nesting of the American crocodile in Puerto Vallarta, placing the Boca Negra estuarine system as the most important for the nesting of the species in the municipality, registering greater number of nests per year and the results obtained suggest a good reproductive status in the region, however, long-term information is necessary to increase the sample size and confirm the reproductive status of the species.

Keywords: Crocodylians, Nest, Characterize

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