Communitarian monitoring of nesting and egg ranching for the rehabilitation of American crocodile (*Crocodylus acutus*) wild population in La Manzanilla estuary, Jalisco, Mexico

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Abstract: Since 2015, the community in charge of the Environment Conservation and Management Unit "UMA Ejido La Manzanilla" (SEMARNAT-UMA-EX-226-JAL) has implemented annual campaigns for the Location and Monitoring of Nests of the American crocodile (Crocodylus acutus) in the La Manzanilla estuary, on the pacific coast of the state of Jalisco, Mexico. Until 2019, 27 nests were registered in two distinct geographic areas: 7 in the sand bar that separate the wetland from the ocean and 20 in the hills skirting the mangrove, inland. The nests are clearly different in each area: greater depth in the sand bar, less depth, greater height and distance to the water in the hills. In both cases, the threats are different: predation by Nasua narica on the hills and urban tourism impact on the sand bar. One of the UMA's objectives being the rehabilitation of the *Crocodylus acutus* population in the estuary, a strategy of ranching has been implemented in order to protect and rescue as many eggs as possible. They are incubated in a bed of sand, under surveillance, within the unit facilities. This "nesting bed" replicates the conditions and natural characteristics of the sand bar's nesting sites; in such a way that in 2019 two females made their nests there. The neonates resulting of this ranching are marked and raised in the unit facilities' ponds until their release in the estuary, generally at six months old.

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