Mechanisms of depredation of artisanal gillnets by common bottlenose dolphins (*Tursiops truncatus*) in coastal waters off Alvarado, Veracruz, México

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Conflicative interactions between fishers and dolphins cause economic loss, leading to retaliation against dolphins; this modifies behavior, social structure, and communication on the animals involved. This study aims to evaluate the impact of artisanal fisheries on the social structure and acoustic-behaviour dynamics of bottlenose dolphins, under “controlled” and experimental conditions on the field to determine possible triggers and deterrents of these interactions. The granted funds were used to pay for travel expenses to attend training sessions of drone handling, and part of the field work expenses, as well as to purchase materials to construct acoustic equipment. Likewise, three prospective field trips were accomplished to adjust the methodology; for instance, within the controlled area, the fixed-point platform on land was changed to a fixed-point in the water. This allows to maximize flight and recording times with the drones. Moreover, in these surveys we have observed larger dolphin aggregations compared to previous studies in the area during the fishing activity. Thus, the observations were adjusted to focus on the closest group to the research platform. These new settings are proposed to ensure that acoustic, behavioral and photo-ID records are all from the same dolphin group.

We will continue with collecting data in the field to understand the influence of the interaction between artisanal fishing and bottlenose dolphins. The preliminary results of this research will be presented next year 2023 at the XXXVII meeting of SOMEMMA and/or other scientific venues. I intend to present the final results of this research in 2025 at the 26th biennial of the Society of Marine Mammalogy.