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SANTA BARBARA - SANTA CRUZ

Dear Editor,

Enclosed please find our manuscript "Effectiveness of community-based TURF-reserves in Mexican small-scale fisheries" submitted as a **Research Article** to PLoS ONE.

TURF-reserves are marine reserves implemented within spatially explicit property rights known as Territorial Use Rights for Fisheries (TURFs). While these have been the focus of important theoretical research, few empirical work has proven them to be effective fisheries and conservation management tools. A 2014 change in Mexican regulation leading to the widespread implementation of TURF-reserves provides a great opportunity for us to: 1) empirically test their effectiveness, 2) identify strengths and opportunities for improvement, and 3) provide recommendations to guide management of these and other community-based marine reserves. Our manuscript provides the first empirical impact evaluation of community-based TURF-reserves in small-scale fisheries using a set of ecological, socioeconomic, and governance indicators.

Our findings suggest that these reserves have had little impact on the local systems, even when accounting for the strong governance structures, enforcement, and compliance under which they operate. We highlight pitfalls in the design and implementation of community-based TURF-reserves, which include poor ecological coherence in reserve design, the need for more time for reserves to exhibit an effect, or implementation of unneeded reserves in already well-managed fisheries. We also identify that while reserves failed to provide fishery benefits, there are several additional ecological, economic, and social co-benefits. Our work provides important insight into the effectiveness of community-based TURF-reserves that may inform future management interventions.

With current targets set to increase ocean protection, it is important that we understand the effects of our interventions so we can better inform management. Our work is of major relevance to policymakers, conservation organizations, resource managers, and scientists across a range of disciplines. Publication in PLoS ONE will allow us to effectively reach this broad audience, supporting much-needed actions to inform marine resource management and incentivize evidence-based conservation.

All authors have read and approved the manuscript and agree with its submission. The manuscript is not under consideration elsewhere.

Please feel free to contact me as the corresponding author to discuss any questions you may have about our team's research or this manuscript.

Best regards,

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