Sandra Erdmann Fundación Naturaleza El Salvador

Pasaje Francisco Campos #166 A, Colonia Escalón, San Salvador

Wednesday, 12th June 2019

Dear Professor Fernando Álvarez Noguera, Chief Editor of Revista Mexicana de Biodiversidad

We wish to submit an original research article entitled "Is this rock pool suitable to live in? Intertidal rock pools fish diversity of El Zonte, El Salvador" for consideration by Revista Mexicana de Biodiversidad editorial board. We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

Less than 10 published articles have described the ecology of intertidal fish communities in the Tropical Eastern Pacific (TEP). However, the intertidal zones are highly diverse in species, dynamic and vulnerable to coastal modification. Thus, we believe this is a relevant research for ecology of intertidal rock pool fish communities that will contribute to fill gaps of knowledge in the region. Furthermore, we assessed the role of habitat structure and environmental variables and in rock pools fish communities considering fish depopulated rockpools, which are habitats that are usually neglected in most of the studies. Analysing these habitats provided insights of the most relevant variables that determine occurrence, abundance and species richness in rockpools. Additionally, we included rockpools that varied in both extremes of each variable a process that allowed us to confirm the influence of those variables in fish communities. We provide evidence that fish assemblages are significantly impacted by rock pool's volume and their bottom surface rugosities, since our results demonstrate that fish individuals inhabit rock pools with a minimum volume of 0.29m³ and a surface roughness of 4.7%. Additionally, we detected that when rockpools have similar volumes, surface roughness alone is enough to determine the occurrence of fishes in it, thus surface roughness can make unsuitable habitats suitable. This is of high relevance, because our research study sheds light onto and sets thresholds for habitat choices of fish populations in intertidal rock pools.

We believe that this manuscript is appropriate for publication by Revista Mexicana de

Biodiversidad, because our investigation provide crucial insights on the interactions of intertidal

fish communities and their environment in the TEP. Moreover, our study's outcomes allow

applicable tools for conservation approaches providing evidence about the features that make

rockpools suitable habitats for fishes. In conclusion, our research supports conservation initiatives

to properly evaluate the structural composition of fish assemblages and contributes to the

understanding of fish habitat choices based on underlying patterns we detected.

We have no conflicts of interest to disclose. Please address all correspondence concerning this

manuscript to me at sandra.erdmann@jcu.edu.au. Thank you for your time and consideration of

this manuscript.

Sincerely,

Sandra Erdmann

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