Dear Editor,

Thank you for giving us the opportunity to re-submit a revised draft of our manuscript newly titled, “*Assessing the need for temporary fishing closures to support sustainability for a small-scale octopus fishery*”. We thank the reviewers for their constructive comments on the manuscript. We have now altered our framing, addressed limitations in the data, and clarified other points in the text.

Below we detail the changes we made to our manuscript in response to each reviewer comment. We leave the *original reviewer comments in red, italicized font*. Our responses are in black, Roman font. We have also included line numbers of the revised manuscript for each response.

**Editor Feedback** *\*line 115: I think it is here you should be very specific that you are only using data up through 2006.*

This has been changed on lines 16-17 to read “2) as well as fit a Levkovitch matrix to the data collected in 2006 on *Octopus cyanea* populations in southwestern Madagascar, and 3) given this information in 2006, we will determine the frequency and length in which these temporary closures should take place…”

*\*lines 115-117: Would item #2 (life history values) come before #1 (the model using the life history information), as you need the former to do the later? Or maybe, as is presented in the Methods, you have identified a method to use the sparse data, the you set out to parameterize that model via the life history analysis. If that is the case, then the way you have it is fine.*

Objectives #1 and #2 have been switched on lines 15-17 to read “1) we will create a theoretical estimation of the species’ life history traits in different stages of its development, 2) as well as fit a Levkovitch matrix to the data collected in 2006 on *Octopus cyanea* populations in southwestern Madagascar”

*\*lines 318-324: Reviewer #1 had noted that there are more recent stock assessments of octopus in Madagascar, and that additional data has been collected since 2013. If I am not mistaken, I do not see any reference to those efforts in the paper. It seems critical to not just point out that you are not conducting a current stock assessment-- more an evaluation of population growth, what effects it, and what management could effectively improve it-- but that there is more current information and/or assessment results (as recent as 2022 according to the reviewer) that confirm or not how well management has improved stock status. I think if you add a sentence or two acknowledging the relevance of that information to what you have done, it would address the last remaining major comment of Reviewer #1.*

Lines 320 -323 been added which note “In fact, more recent and comprehensive research has shown that this fishery has been fished largely sustainably from 2015 to 2017, however since then, the fishery shows evidence of operating at capacity or above (Roa-Ureta, 2022).”