

We would like to thank the reviewer very much for this helpful and constructive feedback and would be happy to revise our manuscript to take their understandable points of criticism into account. As the reviewer correctly pointed out, this study is largely based on a model we have already published in *L&O*. However, while the previously published study focused on the analysis of phytoplankton population dynamics, in this manuscript we focus on the larger, ecological aspects. To introduce readers to the model, we chose to summarize the results from our published study (lines 230–254), as these results are also relevant to the discussion of the new ecological results. However, we understand the criticism that this makes it unclear what has already been published and what is new in this manuscript. We therefore suggest moving Fig. 2, which can also be found in a similar form in Hochfeld & Hinnert (2024), to the appendix and formulating a clearer delineation of the new results compared to those previously published. Similarly, in the revised version of our manuscript, we suggest describing the modifications of the model more clearly compared to the previously published model. Finally, we propose to fundamentally revise the manuscript in order to emphasize the new key general findings more clearly.

References

- Hochfeld, I., & Hinnert, J. (2024). Evolutionary adaptation to steady or changing environments affects competitive outcomes in marine phytoplankton. *Limnology and Oceanography*, 69(5), 1172–1186. <https://doi.org/10.1002/lno.12559>