

We appreciate the comments provided by the two reviewers and their comments have helped us to improve the manuscript. The main concern raised by both reviewers was that our experiment was not designed to test specifically for gender, yet the paper emphasizes our finding that gender has a major impact on the coral response to ocean acidification. Nevertheless, both reviewers agreed that this result is exciting and novel, and needs to be shared with the community. Thus we have revised our manuscript to increase the discussion of the questions the experiment was intended to test while maintaining emphasis on our most significant finding: that reproductive status and gender are important in determining the coral response to ocean acidification. We have modified the title to better reflect the original intent of the experiment as well as the gender result. The abstract and discussion have been expanded to provide a more thorough treatment of the questions the study was originally designed to test.

In response to the comments of reviewer #1 we have added more detail on the choice of temperatures. Our temperatures were chosen based on previous work which investigated the effect of temperature on calcification in *Astrangia poculata* - we wished to use one temperature (24°C) at which photosynthesis enhances coral calcification, and another temperature at which symbiosis has a much smaller effect, for which 16°C was used. This was intended to provide another piece of evidence to help understand how symbiosis may interact with environmental variables to influence calcification. Testing the effects of elevated temperature was not an objective of the current study, though prior work has shown that growth rates for *Astrangia poculata* increase with temperature even at temperatures exceeding the seasonal range (e.g. Jacques et al., 1983).

We agree with the reviewers that follow up studies focusing on how spawning and CO₂ may interact are definitely needed. However, many groups around the world are currently conducting CO₂ manipulation experiments without considering the gender or reproductive status of their experimental organisms. The sooner our findings are available, the sooner this obviously important variable can be accounted for in existing experimental set-ups. In addition, we expect that our paper will spur important new research into how spawning and energy investment in gametes may influence the response to ocean acidification of many different types of marine calcifying organisms.