

The purpose of this manuscript is to ask whether alternative stable states of a community can emerge as the product of natural selection on one of the community members. The authors use a model of floating and submerged macrophytes in a shallow lake to explore this question. The authors find that natural selection can lead to the emergence of alternative stable states, but only under fairly restrictive conditions.

Altogether, I really enjoyed reading this manuscript. It merges a nice straightforward question with a straightforward model and analysis. The figures are well drawn and the explanations are very clear. As I read the paper, I wondered how a variety of depths in the lake would influence the results and how general these types of effects may be for other ecosystems. I was very happy to see that the authors addressed both of these questions of mine in the discussion and conclusion.

My one suggestion for improvement in the manuscript is for the authors to be clearer about what they mean by priority effects and asymmetric competition. I am mostly thinking about being clear that asymmetric competition is the process that leads to an outcome—a priority effect—in both light and nutrient competition. Often times the authors discuss nutrient competition as a priority effect and light competition as asymmetric (e.g. page 4 line 54 onwards).