Two reviewers and I have now read your manuscript, and all of us very much like it. The question, of how alternative stable states arise is novel, and interesting, and the model used to address the question is well described and appropriately analysed. The two expert reviewers have very few queries, all that can be easily addressed in a revision. Once these revisions have been provided, I will be delighted to write a recommendation for this paper.

I have one comment, which may be rather philosophical, and I also identify a couple of minor typos.

The comment: Alterative stable states describe the variety of ways that collections of organisms in an ecosystem can stably arrange themselves. They may then be able to transition between stable states with contrasting amounts of ease depending upon the journey of travel: transition from state A to state B may be easier to achieve than vice versa. When evolution occurs in one or more species, has the system not changed? At least one species has changed due to evolution, so it fair to consider the ecosystem pre- and post-evolution to be an identical composition of interacting organisms that is part of some definitions of alternative stable states? Although this query may be rather tangential to the main question being addressed here -- how do alternative stable state arise -- I would be interested in hearing the authors' views on this. I do not require the authors to modify their paper in response to this query if they think it would simply add confusion.

## The minor typos

In line 4 of the introduction the word "waythat" should be split.

Methods heading "Identifying conditions for diversification" has an erroneous 0.1 in front of it due to a missing {-} in the LaTeX code.