

## ***Interactive comment on “Modelling feedbacks between human and natural processes in the land system” by Derek T. Robinson et al.***

**Anonymous Referee #1**

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This article analyses feedbacks between human and natural processes in land system models. The author describe in detail four recent models of this type and then attempt to draw general conclusions.

I do not have the expertise to comment on the technical aspects of the manuscript. At a more conceptual level, the paper does not seem particularly ambitious. It is mostly descriptive in nature and not particularly analytical. As judged by the abstract, for example: the abstract is mostly a general introduction and then a vague summary of the article structure. I would like to see emphasised more clearly WHAT sorts of "lessons" are learned or "challenges" discussed rather than just that the statement THAT these things are done in the manuscript.

The bulk of the manuscript is a detailed description of the models and some illustrative

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results. I'm not quite sure what role the results are meant to serve. There is no space to expand on them in detail, and they are not picked up upon in the discussion.

In section 3.1, "Lessons learned" the discussion is actually rather general. Only one model (DEED) is actually mentioned. I would like to see more discussion of what was learnt from the models that were discussed in so much detail earlier in the manuscript.

I'd also like a broader discussion of research gaps. Although combining human and natural processes is an important subject, the models discussed here still only address a subset of human processes. In section 2.3, for example, societal and cultural level processes of norm formation regarding food consumption for example are discussed. How else to describe changes in food consumption patterns? Such models probably don't exist in any form, and so can't be expected to be included in this paper, but the authors should indicate that there are still significant research gaps out there.

Minor comment: page 20 line 5: which land management activities were identified?

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