

Advanced Ecology. Sep 5, 2024 Discussion.
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Beisner et al. (2003)

1. What are the two ways in which a population can reach an alternative stable state? Are the ones mentioned by the authors the only ways?
2. How different do alternative stable states need to be for them to be classified as “alternative”?
3. Does the speed / degree of change / lag time in these population dynamics matter more?
4. Humans are outside of the modeling framework in this example (bottom of pg. 377). Does that mean all of these models aren't really useful in the real world?
5. Did this paper help you understand the subject?

Scheffer and Carpenter (2003)

1. What might the term “catastrophic” imply, especially to non-academic audiences? Can there be positive/beneficial regime shifts?
2. Does using “community” and “ecosystem” worry you given the simple systems in Noy-Meir (1975) and May (1977)?
3. External conditions should be independent or slow (pg. 651). How well does this statement apply to modern research interests? How slow is slow?
4. Disturbance can trigger a shift to another permanent state (pg. 653). “Permanent”...?
5. How strongly should we be influenced by theory based on qualitative reasoning (vs. quantitative, mechanistic theory?)