

EEB 319 Lab Assignment 2 – Stability and Resilience

For this week's lab you will explore the concepts of stability and resilience that we have covered in lecture as they appear in the primary literature and write a short essay. There are two readings assigned: a research article (Augustine et al. 1998) that is to be the primary focus of your essay and a second context paper (Scheffer and Carpenter 2003) to help you get oriented with how the focal paper is situated in the literature.

Primary: Augustine D.J., L.E. Frelich, and P.A. Jordan, 1998. Evidence for two alternative stable states in an ungulate grazing system. *Ecological Applications* 8, 1260-1269.

Context: Scheffer, M., and S.R. Carpenter, 2003. Catastrophic regime shifts in ecosystems: linking theory to observation. *Trends in Ecology and Evolution* 18, 648-656.

Each student will write a short critique similar to a *Nature* 'News and Views' article on the *primary paper*, describing the implications and significance of the study, as well as possible future directions. The critiques must be less than 2 pages double spaced, with 12-point Times New Roman font and 3 cm margins, not including references. Citations and references should be formatted according the style of the journal *Ecology*. Go to the journals *Nature* and *Ecology* to study the article style (*Nature*) and citation format (*Ecology*).

Note on Readability:

Good writing takes practice. Organize your ideas clearly and use simple sentence structures and words. Simple does not mean easy or dumb. Every sentence and every word in your critique should be there for a reason. Strive to be easily understood rather than unnecessarily complex.

Essay Rubric (10 points total)

News and Views essays should conform to the following standards of content and form:

- The information presented should be accurate and relevant. Situate the primary paper in the context of broader questions in the field ("zoom in" from the general to the specific) and explain why its findings matter. **(4)**
- The essay should use primary peer-reviewed literature beyond the primary and context papers to help set the context. Include influential papers preceding the primary paper to characterize the historical context as well as recent literature to characterize the impact of the focal paper. Avoid obscure and/or non-peer reviewed literature. Approximately 5-8 citations is a good target. **(2.5)**
- The critique must have a structure. Different paragraphs must serve different functions, such as introduction, content on a topic, or conclusion. **(1)**

- Paragraphs must have internal structure. A paragraph should have a topic sentence that tells the reader what it is about. Sentences should follow logically from each other. **(1)**
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- Critiques should have correct grammar, spelling, and punctuation. Proofread! **(.5)**
- Well-written: readable and free of specialized scientific vocabulary. **(.5)**