

Chapter 17 - Ecological Succession: Process of Change in Ecosystems

Read all sections, **but just skim 17.4-17.5**

1. Provide 2 explanations for the term succession.
2. How does primary succession differ from secondary succession. Provide examples of each.
3. How are autogenic and allogenic succession patterns different? What is another type of succession sometimes observed, and how is it different from autogenic and allogenic factors?
4. Mechanisms, pathways, and models of succession provide an important ecological framework for understanding change in plant communities. Explain each of these concepts in your own words.
5. VERY briefly review the classical/modern theories and models of plant succession. What are the distinguishing features of the monoclimax, polyclimax theories? How are individual species traits and life histories important to developing a successional model?
6. As a successional mechanism, how is colonization an important factor? What is a "safe site"? How do characteristics of pioneer species make them adaptive to colonize a site following disturbance?
7. Distinguish between competition vs. facilitation during plant succession.
8. How is relay floristics different from the concept of initial floristics conditions?
9. What are six factors affecting rates of successional change in an ecosystem?
10. Identify three types of seres occurring along a moisture gradient. Provide an example of each type.
11. Why is a stable endpoint to succession (i.e. a "climax community") considered a unique and theoretical concept?
12. How does disturbance influence forest succession patterns? What is the effect of large-scale vs. small-scale disturbance in a forest, and provide an example of each.
13. What are three important elements of plant populations considered in the "vital attributes" version of the multiple pathway models?
14. What are the successional impacts on forests due to active management and timber harvest?