**Community Ecology**

**Read:** Sections in Chapter 54

**Watch**: *Bozeman Videos – #46, 47, 49, 51, 55*

**Community Objectives**

1. Explain how competition contributes to competitive exclusion, resource partitioning, and character displacement.
2. Explain how predation contributes to changes in coloration (aposematic and cryptic) and the evolution of mimicry (batesian and mullerian).
3. Explain how competition, parasitism, predation, mutualism, and commensalism can all affect the distribution and abundance of populations. Provide examples of each effect.
4. What is biodiversity?  How is it measured?
5. How do keystone species contribute to the tropic structure of an ecosystem?  Provide examples of the effects of each. Provide examples of how disruption to keystone species populations can trigger disproportionately large-scale changes to the structure of an ecosystem.
6. Describe the process of primary AND secondary succession. Give examples as to why each will occur.
7. Explain how interactions among populations affect the pattern of species distribution and abundance.
8. Provide examples of how environmental catastrophes, geological events, and the sudden influx/depletion of abiotic resources or increased human activities can affect species distribution and abundance.
9. Explain how introduced species (invasive) can disrupt the structure of an ecosystem. Provide examples (i.e. Dutch Elm Disease) to support your answer.
10. Explain how the genetic diversity present in a population is related to the resiliency of the population (ability to respond to changes in the environment).
11. Explain why species diversity is greater in tropical regions than in temperate or polar-regions.
12. How would an island’s size and distance from the mainland affect the island’s species diversity?
13. What is eutrophication? How is dissolved oxygen related to aquatic health of the ecosystem?
14. What is primary productivity, gross productivity and net productivity?