

Chapter 35: Populations & Communities

Vocabulary & Reading Focus Questions

VOCABULARY:

- Ecology
- Population
- Species
- Community
- Ecosystem
- Biome
- Biosphere
- Population density
- Carrying capacity
- Logistic growth
- Exponential growth
- Density-independent effects
- Density-dependent effects
- Demography
- Fecundity
- Mortality
- Sex ratio
- Age distribution
- Survivorship curve
- Niche
- Competition
- Interspecific competition
- Intraspecific competition
- Fundamental niche
- Realized niche
- Coevolution
- Symbiosis
- Mutualism
- Parasitism
- Commensalism
- Predation
- Mimicry
- Succession
- Primary succession
- Secondary succession
- Pioneer community
- Climax community

Reading Focus Questions:

1. List the levels of ecological organization in order and describe each level.
2. Describe the equations used to calculate growth rates and explain how fecundity and mortality are involved in the equations.
3. Draw, describe, and give examples of both logistic growth curves and exponential growth curves.
4. Describe the implications of a carrying capacity and explain what would happen to a population that exceeds its carrying capacity.
5. List density-dependent and density-independent factors that influence population density.
6. What are the key components of survivorship curves?
7. Describe the three different survivorship curves and give suitable examples of each.
8. What is the difference between interspecific and intraspecific competition?
9. What is the difference between a fundamental niche and a realized niche? Be familiar with the classic example provided in the book.
10. Give examples of relationships in communities that involved coevolution.
11. What are the three types of symbiotic relationships that have coevolved over time and what impact do they have on the organisms involved. Be familiar with some of the classic examples.
12. Explain how populations of predators cycle with those of their prey. Be familiar with class examples.
13. Discuss the different types of mimicry.
14. Describe the similarities and differences between primary and secondary succession.
15. In what situations do primary and secondary succession take place?
16. What is the difference between a pioneer community and a climax community?
17. Discuss how biodiversity promotes ecosystem stability.
18. Review all Notes, Reading Guides, Class Activities and Labs associated with this chapter.