**UNIT SUMMARY**

1. Describe an ecosystem and its components.
2. Explain how energy flows through an ecosystem.
3. Explain why photosynthesis is an important process.
4. Explain the factors that determine the productivity of an ecosystem.
5. Describe the difference between resistance ***and*** resilience in an ecosystem and explain how they are affected by species diversity.
6. Identify the five categories of ecosystem services ***and*** discuss the importance of each.
7. Define biodiversity, describe how it is measured, ***and*** explain why it is important.
8. Define evolution by natural selection ***and*** describe the ways in which evolution can occur.
9. Explain how evolution leads to increased biodiversity.
10. Identify the factors that influence a species’ chance of adapting successfully to a change it is environment.
11. Explain how environmental change affects species distribution, speciation, and extinction.
12. Explain the concept of an ecological niche ***and*** explain the difference between a realized and a fundamental niche.
13. Discuss the role human activities are having on extinction rates ***and*** why this is of concern.
14. Describe the various ways in which species interact with one another.
15. Describe the roles a keystone species might play in an ecosystem.
16. Describe the process of ecological succession.
17. Discuss the theory of island biogeography.
18. Explain why invasive species are a threat to biodiversity.
19. Discuss the causes of declining biodiversity.
20. Compare the single-species approach to the ecosystem approach to conserving biodiversity ***and*** discuss the strengths/weaknesses of each.