**Chapter 54 Reading Guide**

**-Community Ecology-**

***Section 1***

1. What is a community? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Explain the difference between an intraspecific and interspecific interaction. (This isn’t in the book, but think about the prefix, and answer the question).

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1. State the competitive exclusion principle. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Define ecological niche.

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1. Several species of *Anolis* lizards live in the same types of trees and have a similar diet. Why are they all able to thrive, despite their close proximity?

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1. Briefly describe the following defensive adaptations
	1. Cryptic Coloration- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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* 1. Aposematic Coloration-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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* 1. Batesian Mimicry- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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* 1. Mullerian Mimicry- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Distinguish between endoparasites and ectoparasites. Provide an example of each.

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1. The following chart summarizes the interspecific interactions found among organisms. Complete the chart with appropriate information.

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| --- | --- | --- |
| **Interaction** | **+/- +/+ -/- +/O** | **Explain** |
| Competition |  |  |
| Predation |  |  |
| Herbivory |  |  |
| Parasitism |  |  |
| Mutualism |  |  |
| Commensalism |  |  |
| Facilitation |  |  |

***Section 2***

1. What are the two components of species diversity? Describe them.
	1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. What is an invasive species?

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1. What is the energetic hypothesis?

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1. What percent of energy is transferred between trophic levels? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Define the term biomass.

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1. Explain the dynamic stability hypothesis.

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1. What is meant by a dominant species?

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1. What is a keystone species?

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1. Describe what it means to be an ecosystem engineer?

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***Sections 3-5***

1. What is the intermediate disturbance hypothesis?

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1. Ecological succession is the changes in species that occupy an area after a disturbance. What is the difference in primary and secondary succession?

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1. In terms of latitudinal gradients, where is species richness greatest?

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1. Explain what is demonstrated by a species-area curve.

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1. Closer islands have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ extinction rates and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ immigration rates. Small islands have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ extinction rates and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ immigration rates.
2. What is a pathogen?

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1. What is a zoonotic pathogen and how is it transferred?

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