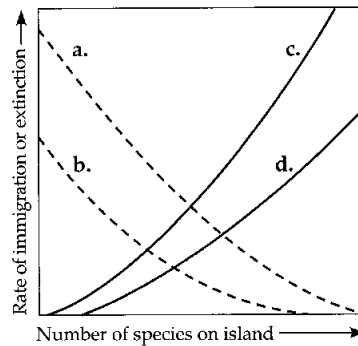


Mr. Gunther
 AP/IB Biology 2
 Chapter 53 v.7 Community Ecology
 IQ

- Two species of Anolis lizards are often found perched and feeding in the same trees, with species I in the upper and outer branches, and species II occupying shady inner branches. After removing one or the other species in test trees, an ecologist observes the following results: Species I is found throughout the branches of trees in which it is now the sole occupant. Species II is still found only in the shady interior when it is the sole occupant. What do these results indicate about the niches of these two species?
- Name the following two types of mimicry:
 - harmless species resembling a poisonous or distasteful species
 - mutual imitation by two or more distasteful species.
- Name and give examples of the interspecific interactions symbolized in the table.

	Interaction	Examples
+/+		
+/0		
-/-		
+/-		
+/-		
+/-		
+/-		

- Experimental data from tree hole communities showed that food chains were longest when food supply (leaf litter) was greatest. Which hypothesis about what limits food chain length do these results support?
- Many freshwater lake communities appear to be organized along the top-down model. What actions might ecologists take if they wanted to use biomaniipulation to control excessive algal blooms in a lake with four trophic levels (algae, zooplankton, primary predator fish, and top predator fish)?
- During the succession following glacial retreat, describe the effects of the alder stage on soil fertility.
- What is the effect of the spruce forest on soil pH?
- Why would the fact that tropical communities are “older than temperate or polar communities contribute to greater species diversity?
- Many biogeographic studies have found that large islands have greater species richness than small islands. Label the lines o the following graph that show how immigration rate and extinction rate vary with the number of species on large and small islands. Indicate the location of the equilibrium number on the x axis for a small and a large island.



- In tests of the integrated versus individualistic hypotheses, which hypothesis is most often supported by the observed distribution of species in plant communities.
- Community ecologists develop models or hypotheses to describe community structure and the factors that contribute to such structure. Briefly explain the following models that were described in this chapter.
 - competitive exclusion principle
 - energetic hypothesis
 - dynamic stability hypothesis
 - bottom-up model
 - top-down (trophic cascade) model
 - nonequilibrium model
 - individualistic hypothesis
 - integrated hypothesis
 - rivet model
 - redundancy model