

ACTIVE READING WORKSHEETS

COMMUNITY ECOLOGY**Patterns in Communities**

Read the passage below, which covers topics from your textbook. Answer the questions that follow.

Another pattern of species richness is that larger areas usually contain more species than smaller areas do. This relationship is called the **species-area effect**. The species-area effect is most often applied to islands, where area is clearly limited by geography. In the Caribbean, for example, more species of reptiles and amphibians live on large islands, such as Cuba, than on small islands, such as Redonda. Larger areas usually contain a greater diversity of habitats and thus can support more species.

The species-area effect has one very important practical consequence—reducing the size of a habitat reduces the number of species it can support. Today, natural habitats are shrinking rapidly due to the ever-growing human population. The inevitable result of the destruction of habitats is the extinction of species.

Read each question and write your answer in the space provided.

SKILL: Recognizing Text Structure

Some of the patterns of text structure you may have seen in earlier sections are similarities and differences, cause and effect, and sequencing information.

1. Which pattern of text structure did the writer use in the above passage?

2. What effect of habitat destruction is identified in the passage?

Circle the letter of the phrase that best completes the statement.

3. The island of Hispaniola is about 1,000 times larger than the island of Saba. According to the passage, one would likely find
 - a. a greater degree of species richness on Saba.
 - b. equal numbers of species on Saba and Hispaniola.
 - c. a greater degree of species richness on Hispaniola.
 - d. a greater variation in habitat on Saba.

Read the passage below, which covers topics from your textbook. Answer the questions that follow.

Ecologists recognize two types of succession. **Primary succession** is the development of a community in an area that has not supported life previously, such as bare rock, a sand dune, or an island formed by a volcanic eruption. **Secondary succession** is the sequential replacement of a species that follows disruption of an existing community. The disruption may stem from a natural disaster, such as a forest fire or a strong storm, or from human activities, such as farming, logging, or mining.

Any new habitat is an invitation to many species that are adapted to be good pioneers. The species that predominate early in succession—called the **pioneer species**—tend to be small, fast-growing, and fast-reproducing. Pioneer species are well suited for invading and occupying a disturbed habitat. They are often very good at dispersing their seeds, which enables them to quickly reach disrupted areas.

Fill in the blank to complete each sentence.

SKILL: Sentence Completion

Complete the sentence by logically finishing the thought.

4. The development of a community in an area that has not supported life previously is classified as

5. Human activities that might cause secondary succession include mining, logging, and _____.
6. Pioneer species are often very good at dispersing
_____.

Circle the letter of the phrase that best completes the analogy.

7. Secondary succession is to a forest that has been destroyed by fire as primary succession is to a
 - a. sand dune.
 - b. bare rock.
 - c. violent storm.
 - d. Both (a) and (b)