

4.3 Succession

Primary and Secondary Succession

1. What is ecological succession?

2. What is primary succession?

3. When a disturbance changes a community without removing the soil, what type of succession follows?

4. Describe the process of succession in an ecosystem.

5. Why does secondary succession typically proceed faster than primary succession?

Climax Communities

For Questions 8–10, complete each statement by writing the correct word or words.

8. After a natural disaster occurs in a healthy ecosystem, secondary succession will cause the ecosystem to return to its original _____.
9. The clearing of a rain forest is the example of a(n) _____ drastic enough to prevent the original climax community from reforming.
10. During primary succession, _____ plays a large role in determining which pioneer species arrives in an area first.
11. What are the two kinds of disturbances that change ecosystems? Give an example of each.

10. Complete the table about some of Earth’s major biomes.

Some Major Biomes		
Biome	Climate and Soil	Plants and Animals
	warm year-round with wet and dry seasons; rich soil	plants: tall, deciduous trees; succulents animals: undergo estivation or migration

Tropical rain forest		
	cold, dark winters and short, soggy summers; permafrost	plants: ground-hugging plants animals: birds and mammals that can tolerate the harsh conditions
Temperate grassland		
	low precipitation with variable temperatures	plants: short growth cycles, cacti animals: adaptations to quickly lose body heat and regulate body temperature
Boreal forest		

1. What are the four main factors that affect aquatic ecosystems?

2. What does the depth of the water determine?

3. What distinguishes the photic zone from the aphotic zone in an aquatic ecosystem?

16. Complete the table about the type of organisms living in each ocean zone.

Marine Life by Ocean Zone	
Zone	Life Forms
	kelp forests, coral reefs
	barnacles, seaweed, starfish
	large marine mammals such as whales, chemosynthetic bacteria