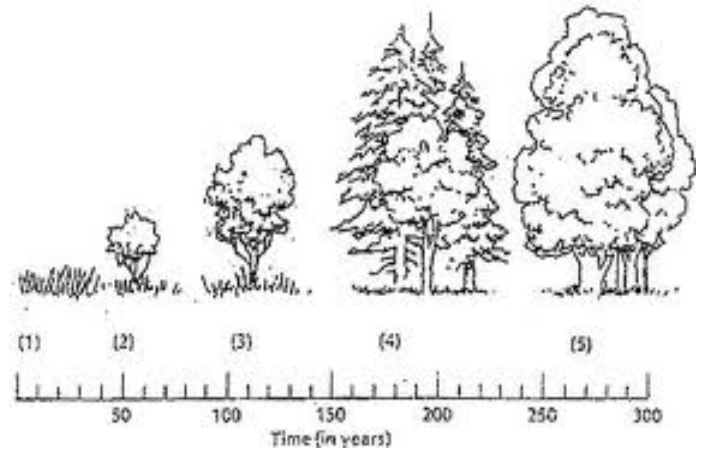


## Chapter 5: How Ecosystems Work

### Section 3, How Ecosystems Change

#### Ecological Succession

- Ecosystems are constantly changing.
- \_\_\_\_\_ is a gradual process of change and replacement of the types of species in a community.
- Each new community that arises often makes it harder for the previous community to survive.



#### Ecological Succession

- \_\_\_\_\_ is a type of succession that occurs on a surface where \_\_\_\_\_.
- It begins in an area that previously did not support life.
- Primary succession can occur on \_\_\_\_\_.

#### Ecological Succession

- \_\_\_\_\_ occurs on a surface where an ecosystem has \_\_\_\_\_.
- It is the process by which one community replaces another community that has been \_\_\_\_\_.
- Secondary succession can occur in ecosystems that have been \_\_\_\_\_ by humans, animals, or by natural process such as storms, floods, earthquakes, or volcanic eruptions.

#### Ecological Succession

- A \_\_\_\_\_ is a species that colonizes an \_\_\_\_\_ and that starts an ecological cycle in which many other species become established.
- Over time, a pioneer species will make the new area habitable for other species.
- A \_\_\_\_\_ is the final, stable community in equilibrium with the environment.

- Even though a climax community may change in small ways, this type of community may remain the same through time if it is not disturbed.

### Ecological Succession

- \_\_\_\_\_ caused by lightning are a necessary part of secondary succession in some communities.
- Minor forest fires remove \_\_\_\_\_ that would otherwise contribute to major fires that burn out of control.
- Some animal species also depend on occasional fires because they feed on the vegetation that sprouts after a fire has cleared the land.

### Ecological Succession

- \_\_\_\_\_ is a type of \_\_\_\_\_ succession that occurs when farmland is abandoned.
- When a farmer stops cultivating a field, grasses and weeds quickly grow and cover the abandoned land.
- Over time, taller plants, such as perennial grasses, shrubs, and trees take over the area.

### Ecological Succession

- \_\_\_\_\_ can occur on new islands created by \_\_\_\_\_.
- Primary succession is much slower than secondary succession. This is because it begins where there is no soil.

### Ecological Succession

- The first pioneer species to colonize bare rock will probably be \_\_\_\_\_, which can live without soil.
- The growth of lichens \_\_\_\_\_, which with the action of water, begins to form soil.