Lesson 1

Community Ecology

Focus Question

What is an ecological community?

New Vocabulary

community

ecological succession

primary succession

climax community

secondary succession

Review Vocabulary

abiotic factor: the nonliving part of an organism's environment

Communities

- A biological community is a group of interacting populations that occupy the same area at the same time.
- Your community also includes other people, plants, animals, bacteria, and fungi.
- Not every community includes the same variety of organisms. For example, one will find different varieties of organisms in:
 - urban communities and rural communities
 - desert communities and polar communities

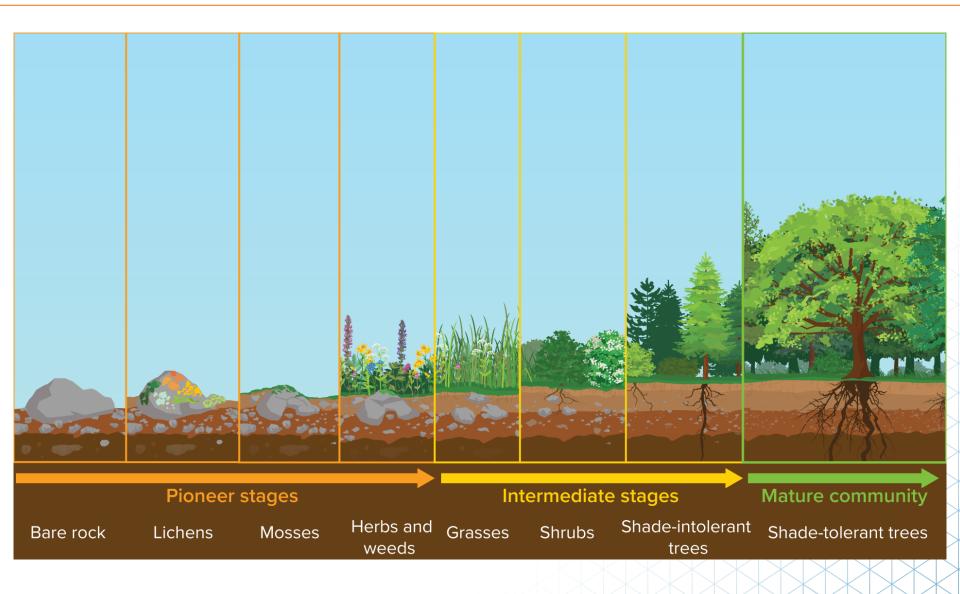
Ecological Succession

- The change in an ecosystem that happens when one community replaces another as a result of changing abiotic and biotic factors is ecological succession.
- There are two types of ecological succession:
 - primary succession
 - secondary succession

Ecological Succession - Primary

- The establishment of a community in an area of exposed rock that does not have any topsoil is primary succession.
- The stable, mature community that results when there is little change in species composition is a climax community.

Ecological Succession - Primary



Ecological Succession - Secondary

 The orderly and predictable change that takes place after a community of organisms has been removed but the soil has remained intact is secondary succession.

Ecological Succession - Secondary

Disturbance	Annual plants	Grasses and herbs	Shrubs	Pines	Young oak/ hickory	Pines die, oak/hickory mature	Mature oak/hickory forest
0	1-2 years	3-4 years	4-15 years	5-15 years	10-30 years	50-75 years	75+ years