

Postal Address Biological Address

Dan Kanney	→	organism
Coldwater	→	community
Ohio	→	Ecosystem
United States	→	Biome
Planet Earth	→	Biosphere

What do the terms community and ecosystem mean to you?

Describe the biological community and ecosystem to which you belong.

Biological communities are constantly changing through a process known as succession. What changes do you think your biological community has undergone in the last 100-150 years?

Community → A group of interacting populations in the same place at the same time

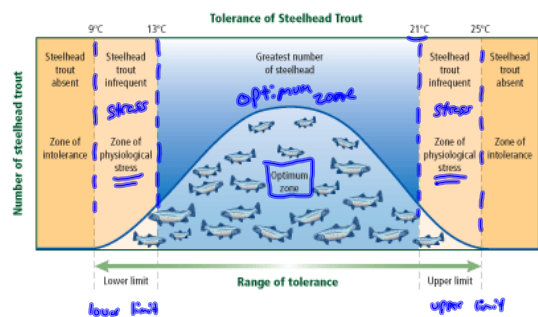
All biotic factors
↳ living

Limiting Factor → Any biotic or abiotic factor that restricts the #s, reproduction or distribution of organisms

eg nutrients, chemicals, diseases, weather, temperature, natural disasters, humans

Tolerance

- Ability of an organism to survive when subjected to biotic or abiotic factors



What is the optimum temp. range? 13-21°C

<9°C >25°C 21-25°C

Why are the limits of tolerance for many factors wider for humans than for most organisms?

* Ecological Succession *

The change in an ecosystem that happens when one community replaces another community as a result of changing abiotic and biotic factors

2 types

① Primary Succession

② Secondary Succession

Primary Succession

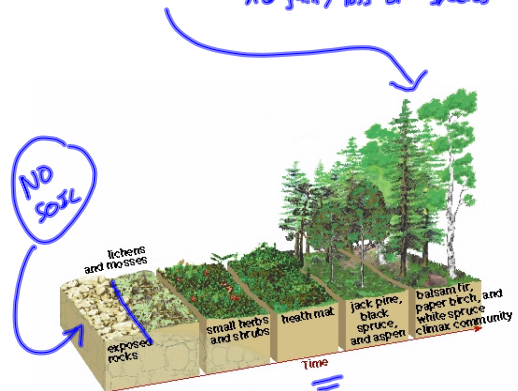
* VERY VERY SLOW PROCESS *

- NO SOIL is present at the beginning
- rock field, cliff, volcanic lava

Pioneer species → 1st living species to take hold in an area going through primary succession

- lichen, moss, fungi, algae
- ↳ Breaks down rock and builds up soil with decaying matter.

Climax community → A stable unchanging community
NO gain/loss of species



Secondary Succession

Occur as a result of disturbances

Natural Disturbances
Fires
Hurings
Disease

Starts w/
SOIL
- takes shorter
amount of time
than primary

