

## Ecological Succession Worksheet

1. Describe the difference between primary and secondary succession.

A: Primary succession occurs in an environment in which new substrate devoid of vegetation and usually lacking soil, such as a lava flow or area left from retreated glacier. Secondary occurs on substrate that previously supported vegetation before an ecological disturbance.

2. What events/disturbances can lead to primary succession?

A: lava flow or area left from retreated glacier.

3. What events/disturbances can lead to secondary succession (10 minimum)?

A: floods, hurricanes, tornadoes, volcanic eruptions, forest fire, harvesting, typhoon, deforestation, pollution, acid rain.

4. Define pioneer species:

A: The species to first colonize previously disrupted or damaged ecosystems that begins a chain of ecological succession.

5. Define climax community:

A: A biological community of plants and animals which, through the process of ecological succession.

6. Describe the relationship between a soil chronosequence and the stages of succession.

7. How is secondary succession the result of disturbance? Describe species succession for secondary succession. How would it change again?

8. What happens to species diversity during succession? Why?

9. Explain diversity along succession using the following succession as an example: disturbance leads to the succession of competitive intermediate opportunistic species.

10. What happens to NPP and CPP during succession? Why?

11. During succession, CPP tends to increase but decrease as time continues within stability.

### Succession of a Small Prairie

Use the diagram to predict the succession of one of your local ecosystems. Include specific species and describe their adaptations to the environment. Describe all stages of succession: intermediate and climax species.

12. Ecological succession in a field (Prague's Grassland Field)

Prague