

Name _____

Succession Webquest

Objectives

Analyze ecological succession after a real disturbance event.

Part 1 - Succession Background Knowledge

The purpose of this part of the webquest is for you to gain more background knowledge about ecological succession. Please respond to questions below in your notes, you will not need to turn them in, but you are expected to use the knowledge from this part for the actual assignment.

Introductory video

Watch the video about "[Succession](#)" to get your brain started! If you have headphones, use 'em!

Online Reading about Succession

Read the online textbook to learn more about succession. Click the section called "[Change in Communities Over Time](#)," and answer the following questions:

1. Define **succession** briefly.

2. What is **primary succession**?

3. What type of disturbances would create a primary succession situation in an ecosystem?

4. What is **secondary succession**?

5. What type of disturbances would create a secondary succession situation in an ecosystem?

6. Is the **climax community** always the same for a given ecosystem? Explain!

7. Continue reading the next section, "Disturbance of a community." How do humans affect an ecosystem?

8. Watch the slides about succession in the [Pacific Northwest](#), and make note of the following:
 - i. Are there any pioneer species that are surprising to you?

 - ii. How long does it take to reach a climax community?

 - iii. What is one question you have about succession?

Part 2 - Apply What You Learned

Complete this part on a separate piece of paper - this is due at the end of class. Choose ONE of the succession simulations either Mount Saint Helens or The Hayman Fire to investigate thoroughly.

Mount Saint Helens

Mount Saint Helens erupted in 1980, and while it devastated the surrounding land and property, it was a unique opportunity for ecologists to study primary succession. Use the two links to answer the questions below.

1. Describe the plant/animal community that was present before the eruption.
2. Describe the pioneer species that helped start the succession process after the eruption of Mt. St. Helens.
3. How long do you think it will take for Mt. St. Helens to reach a climax community - explain your answer.

[Mount Saint Helens](#)

[USGS Mount Saint Helens](#)

[Picture Collection of Succession](#)

[Mount Saint Helens Learning Center](#)

The Hayman Fire

The Hayman Fire occurred in June, 2002, here in Colorado, and was one of the worst fires in Colorado (and western United States) history. It also provides an opportunity for scientists to study succession and fire regimes of the Ponderosa Pine ecosystem. Use the report to answer the questions below.

1. Describe the plant/animal community that was present before the fire.
2. Describe the pioneer species that helped start the succession process after the Hayman Fire.
3. Is fire a normal part of the ecosystem where the Hayman Fire occurred? Explain your answer.
4. How long do you think it will take for the Hayman Fire area to reach a climax community? Explain your answer.

[Lessons from the Hayman Fire](#)

[Photos](#)

[Hayman Fire Research Summary](#)

[Fire Succession](#)

Part 3—Biomes

As a committed conservationist you are concerned about the state of your biome. To ensure the survival of your biome you need money for your conservation projects. Since your biome is the best place in the world, you have decided that perhaps you could make some money by hosting "Survivor" in your biome. If the television show is produced in your biome, the biome's ecological conservation program will receive financial benefits.

Your task is to convince the producers of "Survivor" that your biome should be chosen for the show.

Your task will consist of several parts.

- A. Produce a power point presentation describing your biome, outlining what ecological concerns in your biome merit funding,
- B. Design a reward challenge unique to your biome (poster)
- C. Make the presentation to the producers of the "Survivor" series

[Biomes](#)

[Mission Biomes](#)

[The World's Biomes](#)