

## Stages of Succession Lesson

**Purpose:** Students will be able to identify the stages of succession in a forest.

**Focus:**

- 1) Stages of succession in a forest
- 2) Disturbance factors
- 3) The impact of plant competition in succession
- 4) Wildlife habitats in different succession stages

**Materials:**

- Flip book directions
- Paper for flip books
- Scissors
- Crayons/markers
- Pencils
- Any additional materials for extension projects (*optional*)

**Procedure:**

- 1) Read the stages of succession chart and study the pictures to become familiar with the information.
- 2) Use the pictures to introduce the stages of succession. (*a chart of stages and wildlife is provided*)
- 3) When looking at the pictures, point out that in the early stages there is a large amount of weeds, grasses, and shrubs mixed in with the young trees.
- 4) This is a good time to discuss plant competition by asking "What do you think would happen to the trees if few or no weeds/woody shrubs were growing?" *Answer: The trees would establish a better root system since they would not be competing for nutrients with other vegetation. This healthy start serves as a foundation for the tree to develop on a strong growing course. Also, there would be more room for growth with limited interruption or competition from other plants. Trees that do not have to compete with other plants and weeds show a significant growth rate increase and are healthier overall. Therefore, weed control is a beneficial means in forestry for aiding in the healthy development of trees.*

- 5) Introduce the term **disturbance** (*something that occurred which caused a drastic change in the forest environment*).
- 6) Have students brainstorm different types of disturbances. *Examples: timber harvest, fire, insect invasion, flood, wind storm*
- 7) Make a chart or list of the ideas that the students share.
- 8) Continue discussing the various stages and the attributes of each.
- 9) Extend the discussion by talking about the variety of animals found in each habitat created by the different stages of succession. *Use the provided chart as a guide. This is only an extension to the lesson, not the focus. A more in depth follow-up lesson on the wildlife found in each stage of succession would reinforce this subject.*
- 10) Tell students that they are going to make a flip book of the stages.
- 11) Review the stages of succession, plant competition, disturbances, and wildlife habitats.
- 12) Demonstrate how to make the book using the flip book direction page.
- 13) Students create a flip book by labeling and describing a succession stage on the top and illustrating the stage under the flap. *Since the flip book will consist of multiple pages, it is probably best to have students complete the pages **then** glue the pages together to make the book. Otherwise, the glue may make it difficult to write and draw.*
- 14) Once complete, have students share with a partner.

**Assessment:** Students should have accurately described and illustrated the stages as well as organized them in the correct sequence.

**Extension:** Choose a specific stage and create a diorama or poster that includes the correct wildlife and vegetation found in that area.

\* *A Guide to Oregon's Forest Wildlife: A publication of The Oregon Forest Resources Institute (OFRI) is a great resource for the stages of succession and forest wildlife.*

*Oregon Forest Resources Institute  
(800) 719-9195  
[www.oregonforests.org](http://www.oregonforests.org)*