

Title:

Order Up! Ecological Succession at Table Rock State Park in Pickens, South Carolina

Author(s):

Janet Bouknight Bargar
Santa Fe College
Gainesville, Florida
janet.bargar@sfcollge.edu

Abstract:

Students are given photos of different phases of ecological succession that are from Table Rock State Park in Pickens, South Carolina. Using their knowledge of ecological succession, students arrange the photos in chronological order of the phases of succession.

The activity is designed to reinforce ecological succession concepts by providing students practice in identifying the phases and arranging them in chronological order.

Learning objectives:

1. Identify the different phases of primary succession.
2. Arrange in chronological order the phases of succession.

Notes to the Instructor:

When this activity was done in class, approximately two out of the six photos were placed in the incorrect order. These errors may have been due to students being unfamiliar with the characteristics of the plant species. To reduce errors, it is helpful to briefly describe each type of plant species that is present in the photos before starting the activity. This part also could be tied to previous units about plant diversity.

Timeframe:

Instructor preparation: 5 minutes
Class time: 10 minutes

List of materials:

Attached photos (see Appendix). One set per student group.

Procedure and general instructions (for instructor).

1. Divide students into groups and then give each group a complete set of photos.
2. Instruct the groups to arrange the photos in order of the primary succession phases from the pioneer species to the final stage.
3. The follow-up questions may be assigned to the students or incorporated into a class discussion about the results of the activity.

Procedure and general instructions (for students).

1. Arrange the photos in order of the primary succession phases from the pioneer species to the final stage. When you have completed this task, ask the instructor to review your order of the photos.
2. If assigned by the instructor, answer the follow-up questions below.

OPTIONAL SECTIONS

Follow-up Questions:

1. Define ecological succession.
2. Describe the differences of primary and secondary succession.
3. Explain the similarities of primary and secondary succession.
4. Discuss the process that occurs to make an area inhabitable for organisms through ecological succession. (Hint: What does each step provide?)
5. Apply what you learned to develop a scenario where humans are affected by ecological succession.
6. Describe the feasibility of examining different ecosystems present at a given time in a specific location to infer future ecological succession sequences.
 - a. Discuss the advantages and disadvantages of following a single site over time.
 - i. Explain if such studies are really practical.

Appendix

Photos (All photos were taken by Janet Bouknight Bargar at Table Rock State Park in Pickens, South Carolina. Permission is granted for reproduction of them if used for educational purposes only.)



Description: Rock with lichens.



Description: Rock covered primarily with lichens along with some moss.



Description: Rock almost completely covered by moss. Some lichens are also present.



Description: Side of Table Rock Mountain with low growing shrubs.



Description: Rock with vines, shrubs, and small trees.



Description: Side of Table Rock Mountain with deciduous trees.