

Forest Community

Standards Addressed

Environmental Education Standards:

- A. Questioning and Analysis: A.4.1, A.4.2, A.4.3, and A.4.4.
- B. Knowledge of Environmental Processes and Systems: B.4.4 and B.4.5.
- C. Environmental Issues Investigation Skills: C.4.1.

Key Concepts/Content

- 🌲 To identify five members of a forest community and show how they are dependent on each other.
- 🌲 To define and give examples of the terms interdependence, niche, and habitat.
- 🌲 To identify interrelationships between forest citizens.
- 🌲 To describe the implications of removing citizens from a forest community.

Teacher Background

All life in the forest is dependent on other organisms for survival. Trees depend on animals for seed dispersal, birds depend on trees to supply insect lunches, and deer may depend on low shrubs for cover and food. There is an endless supply of connections that can be made about the forest community. Each one is an example of the interdependence of organisms in an ecosystem.

In this activity, students will explore the habitats of animals and plants that make up a forest community. After exploring the members of their own community, they will discover ways the citizens of the forest community are interdependent.

Getting Ready

Establish a learning station by finding an area with diverse vegetation including ground plants and trees.

Word Cards—Take 5 x 8 note cards (or larger) to display vocabulary words and their definitions. One side may be filled with pictures showing examples of the vocabulary word.

Vocabulary Words: Interdependence
Niche
Consumer
Producer
Decomposer

Safety Issues



- ◆ When taking students outside, be sure to follow all district guidelines.
- ◆ Caution needs to be taken when handling insects and plants.
- ◆ Teachers should conduct a pre-survey of the area to ensure plants such as poison ivy, poison sumac, and nettles, will not pose a problem.

Materials Needed

Tools for observing the forest community members, such as:

- ✿ Activity sheet
- ✿ Hand microscopes
- ✿ Clipboards
- ✿ Binoculars
- ✿ Field guides to plants, insects, birds, etc., and bug viewing glasses
- ✿ Word cards (prepared earlier)
- ✿ Board or something to write on outside

Procedures

1. Ask the students, sitting in a circle, to define the word “community.” On a board or newsprint, list occupations in your community. Add a few if necessary for diversity. Ask the students how the different citizens are connected or dependent on each other.

2. Draw lines between the members showing the connections. Now start to erase one occupation at a time. Discuss what happens to the community.
3. Show the word cards, “niche” and “interdependence.” Explain that members of a community have their niche in society and are interdependent on each other.
4. Point out to the students that there are many kinds of communities other than human communities.
5. Explain that today they are going to examine a forest community and investigate the “citizens” of the forest.
6. Divide the group into pairs and explain that their first task will be to become familiar with the citizens that make up the forest community. Give each group a clipboard, worksheet, and any equipment they might need. Show the word cards for producer, consumer, and decomposer. Define the words together.
7. Have the students explore the designated area for signs of forest citizens. They should be able to list them on the data sheet.
8. Ask each pair of students to pick one organism and complete a data sheet before they return to one large group for presentation of that organism. Try to avoid duplication.
9. As each student presents his/her organism, record it on the board or newsprint. When everyone is finished, add a few more organisms to the forest sheet that the students feel are important. Just like in the discussion of their own community, what would happen if an organism was eliminated from the forest community?

**Evidence of
Student
Understanding**

Emphasize interdependence and promote discussion using these question topics.

- Are there any members of a community that are not dependent on other forest citizens for survival?

- Could any forest community survive without the support of surrounding communities?
- Can people live without other living things?
- What things are we dependent on for survival?
- Could a forest community survive without humans?
- Could humans survive without the forest?

**Reference/
Resources**

- 📖 Ranger Rick's Naturescope: Trees are terrific. *The forest community.* pages 34 - 35, National Wildlife Federation, 1400 16th Street NW, Washington, DC 20036-2266.