

Web of Life Pre Activity

Program at Nature Station: Backyard Safari: Web of Life

Grade Level: 3rd – 6th

Program Length:

Prep time: none after initial preparation

Activity time: 30+ minutes

Group size: Variable

Setting: Classroom or outside

Vocabulary:

- carnivore - any animal that strictly eats meat
- consumer - an organism that consumes food produced by other organisms
- decomposer - an organism that aids in the breaking down of any other organism
- food web - a series of organisms interrelated in their feeding habits, each being fed upon by another one that in turn feeds yet another
- herbivore - any animal that strictly eats vegetation
- omnivore - any animal that eats both meat and vegetation
- predator - an animal that eats other animals
- prey - an animal that is eaten by another animal
- producer - an organism that produces its own food and food for others

Concepts: “All living things are connected.”

Materials:

- cards for all students containing pictures or words showing various forest animals, insects, and components of the forest ecosystem with strings on them so they can be worn around the neck or held in the hand (available through [Nature Watch](#) as game titled “Into the Forest”)
- ball of yarn

Background Information:

All species of wildlife must have certain things to survive. Just like humans, wildlife need food to eat, water to drink, cover or shelter to protect them from bad weather or predators and space to live and raise their young. Combinations of these four things are unique or different for each species. There is a web of life, which suggests that all living things are connected to each other. The removal of one link in the ecosystem has an effect on everything else in it.

Procedure:

1. Distribute to each of the students a forest animal/insect or part of the forest ecosystem. These should be worn or held so all students can identify them.
2. Have students sit in a large, single-file circle with all participants facing inwards.
3. Allow each child to read his or her card and discuss the role of his or her animal/insect or part of the forest ecosystem.
4. Hand the ball of yarn to a person with a plant picture or word. Instruct that person to hold onto the end and hand the yarn to a component of the forest ecosystem that depends on the plant for survival, or that the plant needs to survive.
5. The second person will then wrap the yarn around his or her hand and pass it on to the next “link” in the web of life. Reading the cards will provide the linkages. This procedure continues until all organisms are linked in the system.
6. Have the students move back until all slack is removed from the yarn. Pull tightly on one segment so that the vibration is felt throughout the web. This represents the dependency that all parts of the ecosystem have on each other.
7. Continue to pull tightly. Let the group determine the link which is least important and ask that person to let go while all others continue to pull tightly. What happens when a link is removed? Take up the slack by pulling tightly.
8. Continue to repeat the process of removing one link at a time. Use natural and human-created disasters as examples of ways links could be removed (fire, drought, floods, herbicides or pesticides). Discuss after each removal the consequences and impact on the web of life.

Assessment or Evaluation: Discuss the following:

- Can the system continue to withstand the loss of links? Why or why not?
- How might people influence the stability of the ecosystem for good and for bad?

Source:

- Cards: Nature Watch, 9811 Owensmouth Ave. #2, Chatsworth, CA 91311, 800-228-5816, www.nature-watch.com
- University of Tennessee Extension Service: Ridley 4-H Center