

Aquatic Food Web

Extension Activity for "Water Webs"

Objectives:

Students will be able to:

- 1. define the terms *aquatic*, *ecosystem*, and *food web*;
- 2. give an example of an aquatic food web;
- 3. explain how the organisms in an aquatic environment are dependent upon each other.

Method:

Students will represent various organisms in aquatic ecosystems and will form a food web using string to connect each organism to its food(s).

Time:

30 minutes

Materials:

one package of 3 x 5-inch index cards

markers

string, twine, or yarn (approximately 60 feet) optional: photos of animals and plants

Procedure:

1. Write each of the following organisms on one index card:

Example: Farm Pond

minnows	largemouth bass	person
algae	turtle	mayfly
cattails	worm	bluegill
duck	water strider	catfish
plankton	cricket	crayfish

- 2. Have the children form a circle and choose one child to stand in the middle representing the sun. Next, allow each child to choose an index card containing one of the following organisms.
- 3. Give the child standing in the middle (the sun) a ball of yarn or string. Have the child hold the end of the string then toss the ball to the lowest representative of the food web. (For example, the sun would throw the ball of string to the algae) Next, have the child who caught the ball also hold onto the string and toss the ball to the organism that would be next up the food chain. Continue this until all children are holding the string and the food web is complete.
- 4. Ask the group where the energy for this food web comes from. Explain to them the different relationships and how all things are connected.
- 5. After the web is formed, discuss the following questions:

What is the source of all our energy on earth? (the sun)

Who in the group is a producer?

Who is a consumer?

Which are more abundant—producers or consumers? (producers)

Is there a particular fish more abundant than other fish? Why?

How many different items could each organism eat?

What would happen if one organism were removed? Demonstrate the answer by having a selected student take a step back while holding on to the string. Ask how many others felt the tug.

What might cause the loss of a certain species in the food web? (Three examples are pollution, habitat destruction, and drought.)

How many other organisms would be affected? Stress the important fact that all organisms are dependent upon each other.