

WHAT'S FOR LUNCH?

In the **food web**, every living **organism** is affected by **polluted** water. When the polluted water is **absorbed** by plants, **aquatic** life, and animals, the **consumer** of those living things also digests the **pollution**. It is important to keep the water clean so that food sources will be free of pollution. Can you imagine what happens when an owl eats a snake that has eaten many mice whom have been feeding off of the grass near a polluted body of water? The owl consumes all the **toxins** of the snake, the mouse and the grass. Eventually, this process harms the ability for creatures to reproduce and, in some cases, even causes **extinction**.

FOOD WEB GAME

Learn how the food web is affected in a polluted body of water. **Food Web Games Online:**
http://teacher.scholastic.com/activities/explorer/ecosystems/be_an_explorer/map/form_wildcats.htm#
http://www.harcourtschool.com/activity/food/food_menu.html

You Will Need:

12 or more players (add organisms to add players)

Ball of yarn

Signs with these items on them for players to wear: sun, **algae**, **aquatic** plants, **macroinvertebrate**, bluegill, largemouth bass, mouse, mockingbird, snake, beaver, deer, and human

Index card with these items on them:

EROSION - storm eroded the construction site causing clouded water, which blocked the sunlight in stream - fish gills clogged

EMISSION from CHEMICAL PLANT - hot water and chemicals were released into the river - possible fish kill

POLLUTED RUNOFF - varieties of pollution flow into the river after the storm: erosion, chemicals, litter, and floating **debris**

Instructions:

Have all players stand in a circle with the sun in the middle.

Discuss which organisms the sun would affect. (For example, the sun's energy would feed the algae.) The sun holds the end of the string, passing the ball to the algae, who grabs the string and passes the ball to the macroinvertebrate.

Continue linking string to each chain of the food web. Some organisms will link to more than one organism or plant.

Once your web is complete, have the sun call out one of the items on the index card. For example, the sun will call out "erosion". Because sunlight has been blocked, the sun should tug on the string. Every organism that feels the tug should fall down.

Continue this play discussing a variety of events that could have a negative impact on the body of water.

Resources:

Adapted from: Wow! The Wonders of Wetlands, Environmental Protection Agency, Region VIII, U.S. Department of the Interior, Bureau of Reclamation.