



# Conservation Education Teacher Guide

## WEB OF LIFE

Discover the interdependency of plants, animals and humans through this hands-on program. Explore food chains, food web, and energy cycle!

### CIRCLE OF ENERGY- FOOD WEBS AND FOOD CHAINS

Life can not sustain without energy. Plant and animal life depends upon having enough energy to survive. The source of all energy comes from the Sun. Green vegetation absorbs the sun's energy and uses it to produce their food. Energy is created when animals eat plants or other animals, the food energy is then passed on.

A food chain is the process of transferring food energy from plants to animals to decomposers. An example of a food chain is when energy is passed from the sun to grass, and then to rabbits that eat the grass, and then to owls that eat the rabbits.

### VOCABULARY

- **Herbivores**-Animals that eat vegetation plants (ex. Rabbits, Deer)
- **Omnivores**-Animals that eat plants and animals (ex. Opossums, Raccoons)
- **Carnivores**-Animals that eat meat, other animals (ex. Owls)
- **Decomposers**-Organisms that break down living things into basic components and return them to the soil as nutrients.
- **Food chain**-A method of tracing the flow of energy from the sun to plants to animals and back to the earth (ex. Sun> grasses > rabbit >hawk)
- **Food web**-Linking the many food chains that can be found in one habitat into one big picture.

### Pre-Visit Activities- What did your lunch cost wildlife?

- Ask students to create a list of foods that they either brought or bought for lunch, include all the packaging materials.
- Have students choose one food item and draw a flow diagram of the path the food traveled before arriving to their lunch.
- Have students draw a picture diagram illustrating how food transportation and preparation affect wildlife and the environment.
- Ask students to present their diagrams and give examples of how they can change their food practices and choices to help the environment and wildlife.
- Have diagrams on display when GSWCD comes to visit for further discussion.

Ohio Learning Standards, Ohio Revised Science Standards and Model Curriculum



Kindergarten  
Earth and Space Science: 1  
Life Sciences: 1, 2

First Grade  
Life Sciences: 1, 2

Second Grade  
Life Sciences: 2

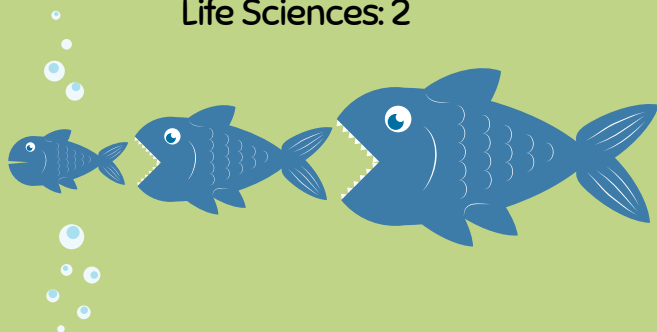
Third Grade  
Life Sciences: 1, 2, 3  
Earth Sciences: 3

Fifth Grade  
Life Sciences: 1

Sixth Grade  
Life Sciences: 4

Seventh Grade  
Life Sciences: 2

Eighth Grade  
Life Sciences: 2



Geauga SWCD Mission:  
"To conserve, protect, and enhance the resources of Geauga County by providing leadership, education, and assistance to all."

## Post-Visit Activities- Designing a Habitat!

- Prepare 3" X 5" cards, and place the name of one of the following animals on each card; trout, beaver, river otter, large-mouth bass, water strider, diving beetle, green frog, northern water snake, clam, and muskrat.
- Divide class into teams of 2 to 4 depending on the size of the class. Have one person from each group draw a card.
- Each group will then be responsible to do research on that animal, consult reference materials, talk to local zoo and wildlife experts.
- Students will compile the information and create a report on their specific animal along with a display box that would resemble an exhibit at a zoo or aquarium (It does not need to be expensive, a large shoe box could be used along with scraps of paper, recycled items, clay and craft supplies.) Have the students be creative!
- Once the display is complete have the students report to the class. They should cover the biological needs of each animal as well as the characteristics of its natural habitat. They should explain how their exhibit meets the needs of their animal. Have the students create a zoo or aquarium display using all of the different exhibit models.

*Pre/Post visit activities are adapted from Project Wild and may need to be adjusted depending on the grade level.*