



The Columbus Zoo and Aquarium endeavors to foster a lifelong connection with nature in children and adults by creating a meaningful link between people and wildlife. These activities are designed to be done either at home or at school. Before diving into the materials, here are some tips to help you plan:

These activities are structured around the 5E Lesson Plan model, commonly used in science education:

**ENGAGE** - Sparking interest in a topic

**EXPLORE** - Student-led investigation of concepts

**EXPLAIN** - Clarification of concepts

**EXTEND** - Student-led application of concepts

**EVALUATE** - Opportunity to demonstrate understanding of concepts

This activity packet will guide students as they explore wildlife and wild places. We encourage parents and teachers to utilize all five activities chronologically to provide students a complete learning experience. These activities can be done in a day, or over a longer time span. It is ideal because the educator can tailor the timing around the needs of the learners.

Each section has a brief activity description and a list of materials needed. The instructions are written for the learner; however, we encourage adults to work closely with their students. (Be sure to supervise students when doing any outdoor activities.) Most importantly, we hope you have a fun and engaging experience!



# FOOD CHAINS AND FOOD WEBS

GRADES  
**3-5**

## 5 STEPS TO A MEANINGFUL ZOO PROGRAM

### ENGAGE

Introduction to food chains and food webs.

### DESCRIPTION OF ACTIVITY

Read **Butternut Hollow Pond** by Brian Heinz.  
Use the **"Food Chain Vocabulary Cards"** to discuss. Cut out the cards. Then find a partner and see how many you can match together. *There can be multiple pairings for the same words!*

### ESTIMATED TIME

**30** minutes

### MATERIALS NEEDED

Copy of **Butternut Hollow Pond** by Brian Heinz  
Copies of **"Food Chain Vocabulary Cards"**

### EXPLORE

Explore your school or home yard for examples of food chains.

Go outside and look for examples of food chains.  
Do any of them overlap? Write your responses on a chart. Notice where they overlap.

**30** minutes

Chart paper, markers

### EXPLAIN

Do any food chains overlap?

Watch **HOA Savanna is back**.  
Make a list of the species described in the video.  
Can you organize them by what they eat? Are they a producer, consumer, or decomposer? What other animals might be found in their native habitats in Africa?  
Create a food web illustrating how energy flows through this ecosystem.

**30** minutes

Drawing paper  
Crayons/colored pencils

### EXTEND

Read to find out about food webs in nature.

Read **"Who Eats What"** by Patricia Lauber.  
Discuss difference between a food web and food chain.

**30** minutes

Copy of **"Who Eats What?"** By Patricia Lauber

### EVALUATE

Apply concepts and create your own food web.

With a partner or on your own, choose an ecosystem and create your own food web using animals from that area.

**30** minutes

Vocabulary cards





# FOOD WEB VOCABULARY CARDS



**CARNIVORE**

**HERBIVORE**

**omnivore**

**PREDATOR**

**PREY**

**FOOD CHAIN**

**FOOD WEB**

**PRODUCER**

**consumer**

**ORGANISM**

**Decomposer**

**SCAVENGER**



# FOOD WEB VOCABULARY CARDS



an animal that eats other animals  
(examples: lion, hawk, snake, wolf)

an animal that eats plants  
(examples: elephant, zebra, koala)

an animal that eats plants and other  
animals (examples: turtle, brown  
bear, raccoon, human)

an animal that hunts and eats  
other animals

an animal that is hunted and eaten  
by other animals

a system that shows the flow of energy  
in an ecosystem, where small animals  
are food for larger animals (example:  
sun > grass > mouse > owl)

many food chains that interact with  
each other

an organism that makes its own  
food; primary source of energy in  
a food chain (examples: oak tree,  
grass, tulip, bean plant)

an organism that needs to eat other  
organisms for food

a living thing

a living thing that breaks down dead  
plants and animals; they turn dead  
material into fertile soil (examples:  
fungi, bacteria, worms)

an animal that searches for and eats  
dead animals (examples: turkey  
vulture, cockroach)

# FOOD WEB VOCABULARY CARDS ANSWERS

VOCABULARY WORD	ANSWER
<b>Carnivore</b>	an animal that eats other animals (examples: lion, hawk, snake, wolf)
<b>Herbivore</b>	an animal that eats plants examples: elephant, zebra, koala)
<b>Omnivore</b>	an animal that eats plants and other animals (examples: turtle, brown bear, raccoon, human)
<b>Predator</b>	an animal that hunts and eats other animals
<b>Prey</b>	an animal that is hunted and eaten by other animals
<b>Food chain</b>	a system that shows the flow of energy in an ecosystem, where small animals are food for larger animals (example: sun > grass > mouse > owl)
<b>Food web</b>	many food chains that interact with each other
<b>Producer</b>	an organism that makes its own food; primary source of energy in a food chain (examples: oak tree, grass, tulip, bean plant)
<b>Consumer</b>	an organism that needs to eat other organisms for food
<b>Organism</b>	a living thing
<b>Decomposer</b>	a living thing that breaks down dead plants and animals; they turn dead material into fertile soil (examples: fungi, bacteria, worms)
<b>Scavenger</b>	an animal that searches for and eats dead animals (examples: turkey vulture, cockroach)



# PICTURE BOOKS



**\*WHILE GRADE LEVELS ARE LISTED, ALL BOOKS ARE APPROPRIATE FOR ALL AGES.**

PICTURE BOOK	AUTHOR	GRADES
<i>Pond Circle</i>	Betsy Franco	<b>K-3</b>
<i>Who Eats What</i>	Patricia Lauber	<b>K-3</b>
<i>Butternut Hollow Pond</i>	Brian Heinz	<b>2-5</b>
<i>Trout Are Made of Trees</i>	April Pulley Sayre	<b>K-3</b>
<i>The Magic School Bus Gets Eaten</i>	Patricia Relf	<b>K-3</b>
<i>What's for Dinner?: Quirky, Squirmy, Poems from the Animal World</i>	Katherine B. Hauth	<b>3-5</b>
<i>The Wolves Are Back</i>	Jean Craighead	<b>3-5</b>
<i>Horseshoe Crabs and Shorebirds: The Story of a Food Web</i>	Victoria Crenson	<b>3-5</b>
<i>Sparrow Girl</i>	Sara Pennypacker	<b>K-2</b>
<i>Hey Diddle Diddle</i>	Pam Kapchinske	<b>K-2</b>
<i>Vulture View</i>	April Pulley Sayre	<b>K-2</b>
<i>Dory Story</i>	Jerry Pallotta	<b>K-2</b>
<i>Pass the Energy, Please</i>	Barbara Shaw McKinney	<b>3-5</b>
<i>What do Carnivores Eat?</i>	James Benefield	
<i>What do Herbivores Eat?</i>	James Benefield	