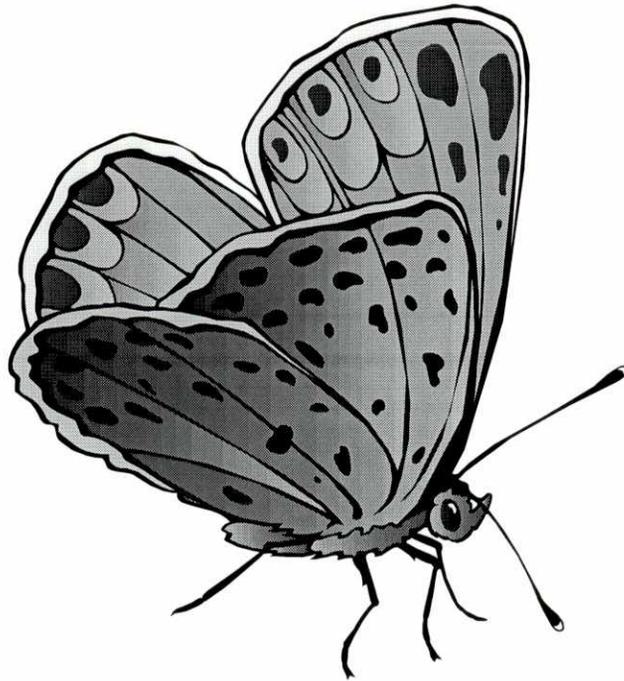


# It's Only Natural

Curriculum-Based Education Program  
for Kindergarten through Third Grade



Jean Lafitte National Historical Park and Preserve  
Barataria Preserve  
Marrero, Louisiana

# Mission Statement for Education Programming

It is the mission of Jean Lafitte National Historical Park and Preserve's education program to satisfy curriculum needs as specified in the *State of Louisiana Curriculum Guides* utilizing the park as a classroom. The programs and activities included in the *Educational Guide to Jean Lafitte National Historical Park and Preserve* are designed to meet these requirements while introducing students to the key qualities of the park.

By engaging in pre-visit, on-site, and post-visit activities, students will focus on learning concepts appropriate to their grade level while developing an appreciation for the natural and cultural resources of Louisiana's Mississippi River Delta region and the diversity of its people.

The activities included in this guide enable students to investigate and to participate in "hands-on" learning experiences. They will build a strong foundation in the use of scientific method, critical thinking, problem solving, and communication skills. These activities also have cross-curriculum applications.

In Jean Lafitte National Historical Park and Preserve, students will learn about the cultural diversity and the environment, which make this region unique. As one of our national parks, Jean Lafitte National Historical Park and Preserve is both a protected treasure and an open-air classroom.

The contents page details, how the park serves as such a classroom. It describes unit activities and refers to the concepts, objectives, generalizations, and learner outcomes from the *State of Louisiana's Curriculum Guides*, which they satisfy.

# Table of Contents

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## Grade Level Expectations:

Kindergarten: SI-E-A1; LS-E-A2; LS-E-A4

First Grade: SI-E-A1; SI-E-A3; AI-E-B3

Second Grade: SI-E-A1; SI-E-A2; LS-E-C1; SE-E-A2; SE-E-A3; SE-E-A5

Third Grade: SI-E-A1; SE-EA1; SE-E-A3; SE-E-A5

## Learning Activities for Children Grades K-3

*It's Only Natural* is a unit of activities designed to introduce children to the importance of living and non-living things in our ecosystem.

### Pre-Visit Activities:

- Vocabulary: Designed to help students become familiar with the terms used in the activities
- Life in a Circle: Students discover and identify a variety of living and non-living things in a small area
- What's For Dinner?: Students will understand how plants and animals in a habitat depend on each other
- In Touch with Nature: Students use their sense of touch to explore.

### On-Site Activity:

- It's Only Natural: Students will explore and learn about the living and non-living things in our ecosystem.

### Post-Visit Activities:

- I Found It!: Students go on a scavenger hunt
- The Tree Book: Students create a book about a tree
- Food Web: Students reinforce what they learned in *What's for Dinner?*

## Related Reading

# Program Themes and Curriculum Objectives

## **IT'S ONLY NATURAL**

**Program Theme:** Living and non-living are equally important in our ecosystem.

### **Curriculum Objectives Met:**

- A. All living things are made of cells and have certain life processes in common.
  - 1. Distinguish between living and non-living things.
  - 4. Observe a group of animals and record similarities and differences.
  - 11. Give examples of animal adaptations to environmental change.
  - 29. Explain how animals are dependent upon both living and non-living components in their environment.
  
- B. All living things interact in an ecosystem.
  - 1. Explain why living things need space, food, water, and shelter.
  - 2. Operationally define habitat and give examples.
  - 3. Compare and contrast organisms that share a habitat.
  - 4. Describe the characteristics of a local habitat and identify plant and animal life found in that location.
  - 7. Describe the components of an ecosystem.
  
- C. Living and non-living parts of the environment exchange energy.
  - 1. Explain that the sun is the primary source of energy for living and non-living parts of the environment.
  - 2. Identify living things that are producers.
  - 3. Operationally define producer, predator, and prey.
  - 5. Construct a model to show how Louisiana's producers, consumers and decomposers depend on each other.
  - 6. Illustrate examples of different food chains in Louisiana.
  - 7. Infer how a food chain is affected by a "broken link"; compare with a food web.
  - 8. Differentiate between the roles of producers and consumers in a food chain.
  - 10. Construct a Louisiana food web that includes humans.
  
- F. Observations are made with our senses.
  - 1. Discuss the perception made with each sense.
  - 2. Give examples of observations made with each sense.
  - 3. Describe how perceptions can be affected by environmental factors: light or dark, heat or cold, noise or quiet.

# Pre-visit Vocabulary

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adaptation - special characteristics that help an animal or plant to be more suited to its environment (a human adaptation is our thumb, try to tie your shoes without using your thumbs)

camouflage - an organism's ability to blend with its environment, thus protecting it from predators (camouflage is an adaptation used by zebras)

community - a group of plants and animals living in a particular environment working together to fulfill their individual needs

consumer - a user of goods and services; in a food chain, an animal that must depend upon plants and/or other animals for its energy

decomposer - a physical element, or organism that causes other organisms, or physical elements to break up and or rot (worms and mushrooms are decomposers)

ecosystem - the interaction of the biological community (animals and plants) and their physical environment (water, air, minerals)

environment - all of the living and non-living things surrounding and influencing an organism

food chain - sequence of organisms starting with green plants in which each is food for higher and more complex organisms

food web - the many connected food chains by which organisms of a community obtain their energy

growth - changes that organisms go through as they mature

habitat - the place where an organism lives; consists of four things needed by all living things to survive *food, space, shelter, and water*

living - an organism such as a plant or an animal that is alive

non-living - something that is not alive, such as rocks, soil, and water

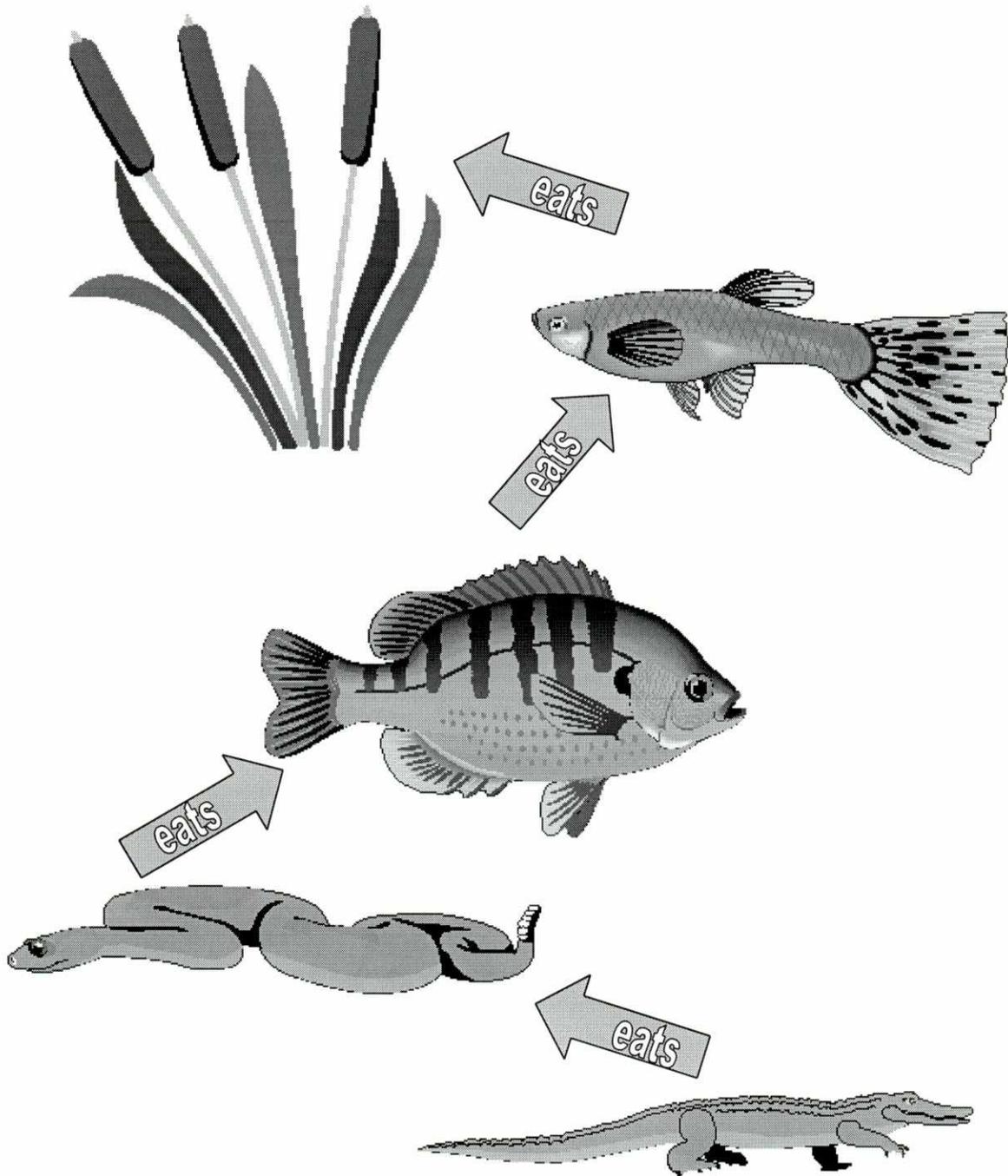
organism - any living thing

producers - an organism that produces or makes food for other organisms. Plants are producers, while animals are consumers.

species - a genetically and adaptively unique plant or animal which is able to reproduce itself and to evolve. For example all humans are of the same species.

# Food Chain

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Food Chain: Sequence of organisms starting with green plants in which each is food for higher and more complex organisms.



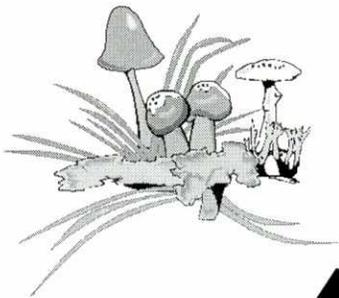
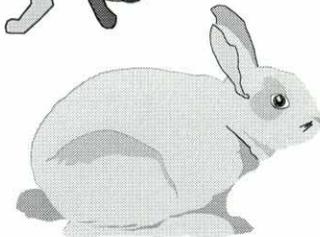
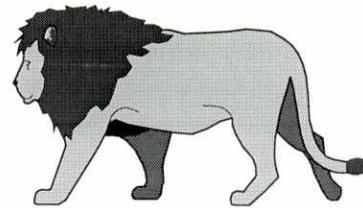
# Producers, Consumers, Decomposers



Producers: organisms (green plants) which take energy from the sun and use it to produce their own food



Consumers: organisms that get their food and energy from other organisms, consumers eat producers and other consumers



Decomposers: organisms that decay or break down other materials returning the elements of which they are made to the soil, air and water



Soil

# Life in a Circle

Objective: For the students to discover and identify a variety of living and non-living things in a small area.

Subject: Science

Materials: several two foot long pieces of string or yarn tied into loops  
spoons or other digging tools

Location: classroom and outside

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Procedure:

### **In the Classroom**

1. Students will name insects, other animals, and objects they have found in their yards at home.
2. Tell students what animals or natural objects may be found in the schoolyard. Make a list of what they expect to find outside.

### **Outside**

3. Give students a loop of string and a spoon. Have the students spread out. They will then lay their loop of string down on the ground.
4. Have the students observe the surface *and* dig into the ground inside their loop. Make a list of everything they find inside their loop.

### **In the Classroom**

5. Students will compare what they found in the circle to their predictions.
6. Discuss with the students how all of the things in the circle may be related, the similarities and differences among the insects and other animals, such as habitat and what they need for survival.

### **Possible variations**

- Have the loop large enough for all the students to investigate together.
- Place the student's loops in very different areas (wet, dry, shaded, sunny, paved) and discuss habitats changing what can live in an area.

# What's for Dinner?

Objective: Through coloring, students will understand how plants and animals in a food chain depend on each other.

Subject: Science, Art

Materials: food chain illustrations (photocopy from following pages)  
vocabulary page with onsite activity  
crayons  
scissors  
paste

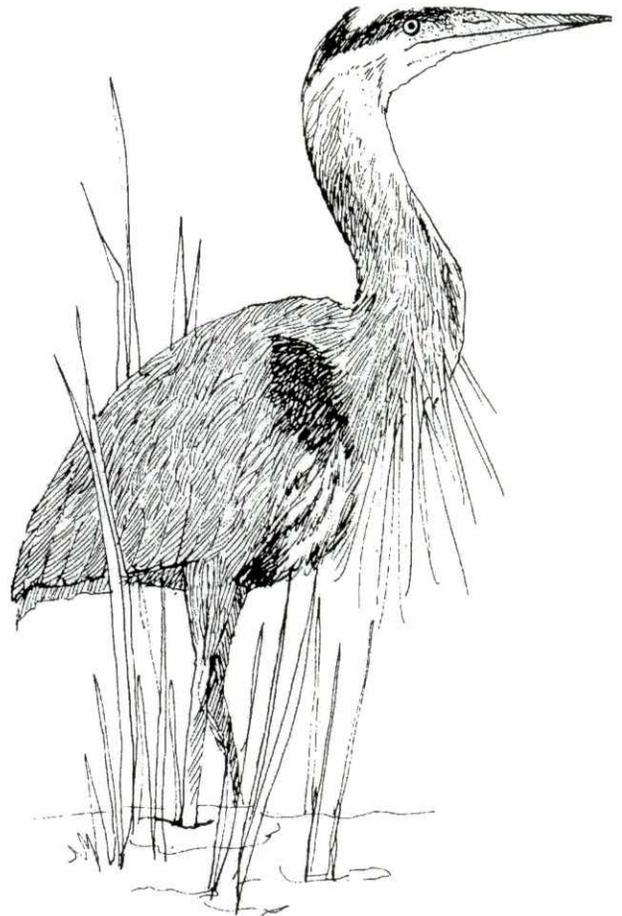
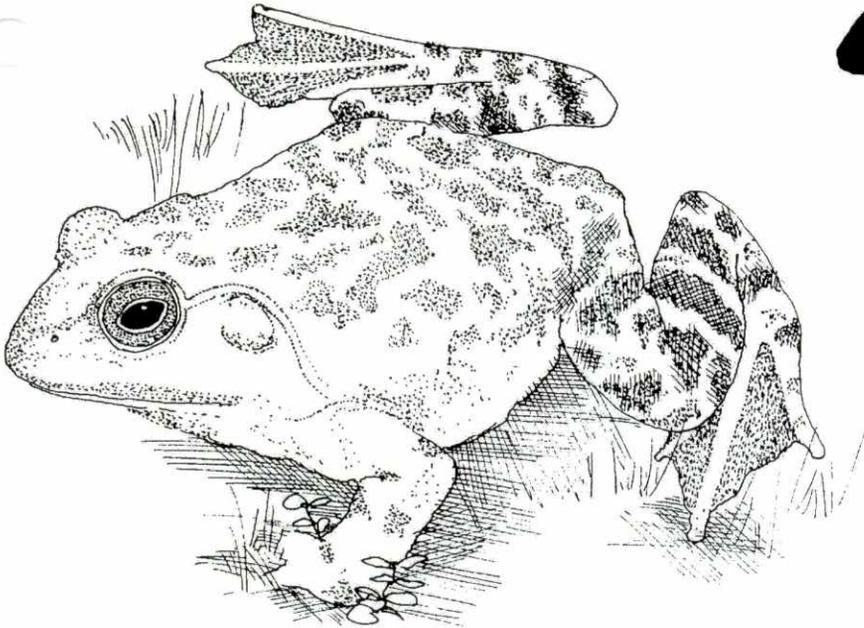
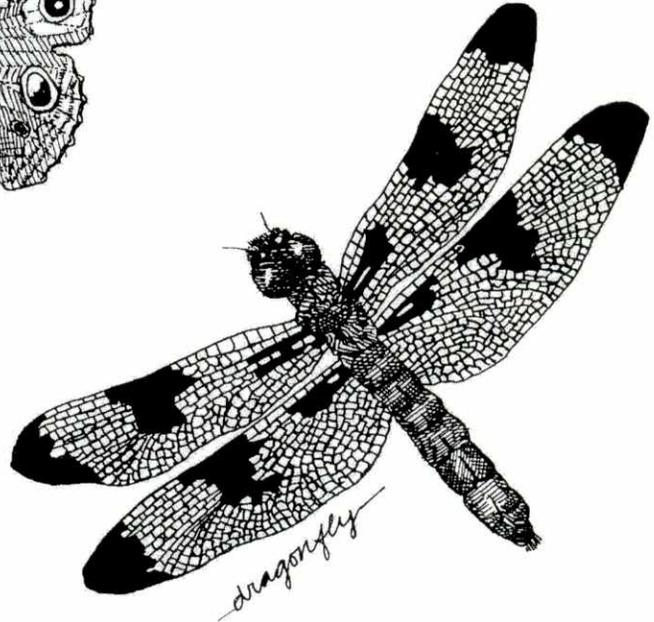
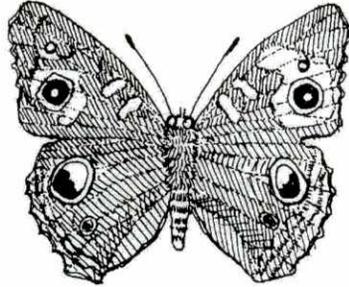
Location: classroom

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Procedure:

1. Discuss with students what a food chain is, and what part producers, consumers and decomposers play in a food chain.
2. Photocopy illustration and distribute to students.
3. Have students color and identify the illustrations as a producer, consumer or decomposer.
4. Have the students cut out illustrations and create a food chain, pasting the illustrations in the correct order on a separate sheet of paper and drawing arrows between the members of the food chain to show their relationship to each other. Discuss how these organisms relate to each other in the food chain.
5. Can the students think of any other food chains that may occur in *Louisiana*?

# Food Chain Coloring Page



# In Touch With Nature

Objective: Students will explore the sense of touch and discover why touch is important to animals, including us.

Subject: Science

Materials: small brown paper bags  
collection of natural (living) and non-living items (leaves, shells, pinecones, etc)  
paper  
pencils  
(optional) blindfold

Location: classroom

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Procedure:

1. Ask students what is important about the sense of touch. *How do they use touch? What if they didn't have it?* Have the students give examples of how animals use the sense of touch.
2. Number small paper bags and individually place the items into them. Depending upon the age of your students you can show them the objects first or not.
3. Pass along the bags and challenge students to "see" each object by touch alone. Ask the students to notice the shape, temperature, and texture of the objects. Have them write down what they believe is in each bag. This will help with discussion later. Through the sense of touch, students will learn the shape, texture, and temperature of the objects. Challenge them to describe the way each object feels.
4. As you reveal what was contained in each bag, first ask the students what they think is in the bag. How many different answers did your class come up with? If you get different answers, try to figure out why. Why did they believe it was a rock and not a feather in the bag? Why could it not be ice?
5. Through the sense of touch your students will realize just how much of the world is at their fingertips, and not in front of their eyes.

**Variation**

- Do this activity using the sense of smell instead of touch. How do nocturnal animals *see* at night?

# Post-visit Activity

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## I Found It!

Objective: Students will reinforce the concept that living and non-living things are part of our ecosystem by locating and, in some cases, collecting the items below.

Subject: Science, Physical Education

Materials: garbage bag  
basket

Location: outdoors

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Procedure:

1. Discuss with your students what you expect to find on your trip outside. Make a list of your expectations.
2. Take students and materials to school playground or nearby park.
3. Locate and collect in a basket non-living things.

*For example:*

a fallen leaf	a feather	a rock
a pine needle	a seed	a small branch that has fallen

4. Collect trash in a bag and recycle.

*For example:*

paper	plastic	aluminum
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5. Find and identify, but **do not collect** living things.

*For example:*

a flower	a bird	a spider
tree sap	a dragonfly	Spanish moss
a butterfly	an ant	a tree

6. Make a list of what you find, compare it to your first list. Discuss what you and your students find. Did you find anything unexpected? Did you not find something you did expect to find? How did the non-living things get to the park/schoolyard? How did the living things get to the park/schoolyard? How did seeds for all the plants travel? How did the trash travel?

# The Tree Book

Objective: Students will reinforce learning that living and non-living things in a habitat depend upon one another.

Subject: Science, Art, and Language Arts

Materials: storybook sheet (photocopied from next page)  
scissors  
stapler

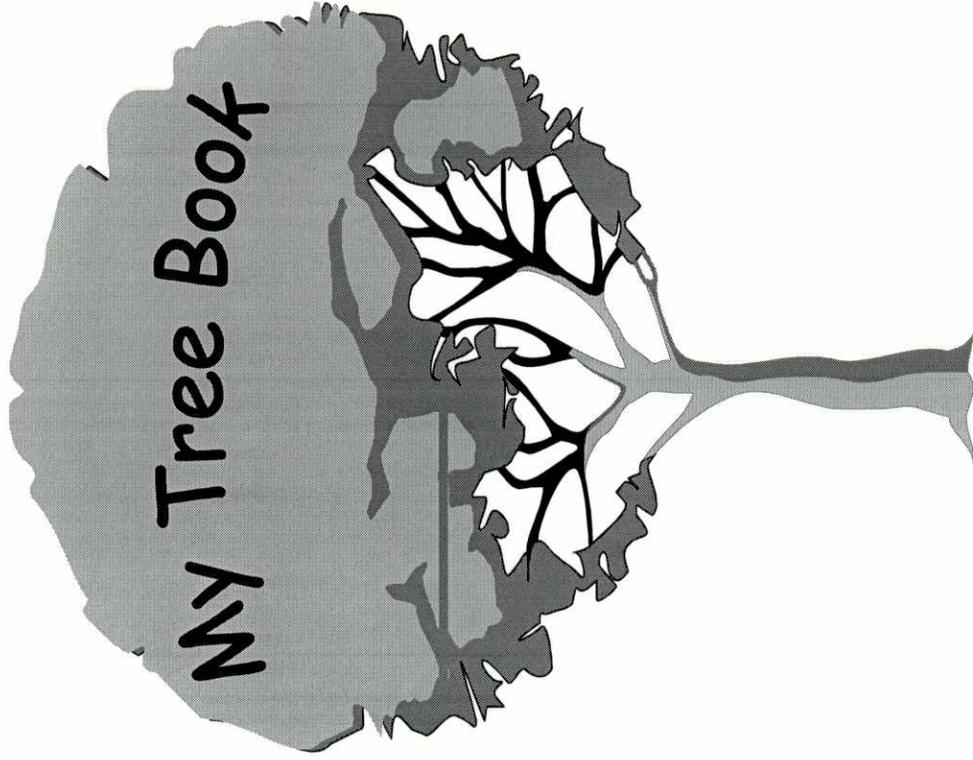
Location: outdoors

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Procedure:

1. Prepare the tree books ahead of time. You may want to have the students look at the books ahead of time so they will know what to observe, or complete this activity outside.
2. Discuss what a tree needs to survive.
3. Take the students outside and instruct them to observe any tree. They should note what it looks, smells, and feels like, also have them observe the animals and plants found on and near their tree.
4. Have the students complete the “My Tree Book”, photocopied from next page.
5. Discuss what the students observed or felt about their trees. *Why did they pick their particular tree? What did they find that was unexpected or expected? Was their tree living or non-living? Would they have found different plants and animals associated with a non-living vs. a living tree? etc.*
6. At teacher's discretion, students may work independently or in groups.

What lives in or uses your tree?



Name \_\_\_\_\_

Draw a picture of your tree.

Describe your tree.



# Food Web

Objective: To demonstrate in a three-dimensional way the interconnections involved in a habitat through the food cycle.

Subject: Science

Materials: ball of string, vocabulary page with on-site activity

Location: classroom

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Procedure:

1. Complete the *What's for dinner?* activity.
2. Have the students stand in a circle. You stand in the middle with the ball of string. Your students are now going to build a food web.
3. To start off the food web, ask the students what is at the base of all food chains. The answer you are looking for is the **sun**.
4. The student, who answers **sun** first starts off the **food web**. Give them the ball of string.
5. Ask the students, "What receives its energy directly from the **sun**?" The answer you're looking for is a **producer**, have the students name a specific species of plant (i.e. live oak not just tree). Then have the student with the ball of string hold on to the end of the string *and* throw the ball of string to the student who named a **producer**. You should now have a line of string connecting the **sun** to the **producer**.
6. The food web continues to grow. Ask the students, "What receives its energy from (eats) the **producer**?" The answer you're looking for is a **consumer**, have the students name a specific species of animal (i.e. lubber grasshopper not just bug). Then have the student with the ball of string hold on to the string *and* throw the ball of string to the student who named a **consumer**. You should now have a line of string connecting the **producer** to the **consumer**.
7. The food web can continue to develop from one **consumer** to another **consumer**.
8. Eventually ask the students, "What receives its energy from the **dead consumer**?" The answer you're looking for is a **decomposer**, have the students name a specific organism (i.e. earthworm not just creepy crawly). Then have the student with the ball of string hold on to the string *and* throw the ball of string to the student who named a **decomposer**. You should now have a line of string connecting the **dead consumer** to the **decomposer**.
9. The food web continues to grow. Ask the students, "What gets its energy from the **decomposer**?" The answer you're looking for is a **producer**, have the students name a specific species of plant (i.e. duckweed not just plant). Then have the student with the ball of string hold on to the string *and* throw the ball of string to the student who named a **producer**. You should now have a line of string connecting the **decomposer** to the **producer**.
10. The food web continues to grow, until you run out of string.

# Related Reading

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- Bernard, Annika. *Wetlands Plants and Animals Coloring Book*, Dover Publishing, 1994. **c \***
- Brooks, Felicity. *Protecting Our World, A Beginner's Guide to Conservation*, EDC Publishing, 1991. **c\***
- Burnice, David. *How Nature Works - 100 Ways Parents and Kids Can Share the Secrets of Nature*, Darling Kindersly Ltd., 1991. **c**
- Caitlin, Stephen. *Wonders of Swamps and Marshes*, Troll, Library of Congress, 1990. **c\***
- Cavalier, Elois J.. *T- Noc's Cajun Environmentalist*, Blue Heron Press, 1995. **c\***
- Duensing Edward and A.B. Millmoss. *Backyard and Beyond, A Guide for Discovering The Outdoors*, Fulcrum Publishing, 1992. **a\***
- Field, Nancy and Sally Machlis, *Discovering Endangered Species, Adventure Activity Book*, Dog Eared Publishing, 1994. **c\***
- Hare, Tony. *Habitat Destruction (Save Our Earth Series) Illustrations (grades 5 - 8)*, Watts Gloucester Press, 1991. **c**
- Harlow, Rosie and Morgan, Gareth. *One Hundred Seventy Five Amazing Nature Experiments*, Random Books Young Readers, 1992. **c**
- Holmes, Anita. *I Can Save the Earth. A Kid's Handbook for Keeping Earth Healthy and Green*, Messner. S & S Trade, 1993. **c**
- Javina, John. *Fifty Simple Things Kids Can Do To Save The Earth*, Andrews and Mc Meel, 1990. **c**
- Kennedy, June C. *Bayou Country Ecology*, Blue Heron Press, 1991. **a**
- Knobel, Edward. *Identify Trees and Shrubs by Their Leaves. A Guide to Trees and Shrubs Native to The Northeast*, Dover Publishing, 1972. **a**
- Lockwood C.C.. *Discovering Louisiana*, Library of Congress, 1986. **a\***

**c** = children's book

**a** = adult book

**\*** = books sold by Eastern National at the Barataria Preserve visitor center

# Related Reading

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- Miller Arthur P. Jr.. *Park Ranger Guide to Wildlife*, Stackpole Book, 1990. **a\***
- Mullins, Patricia. *V is for Vanishing - An Alphabet of Endangered Animals*, Harper Collins Publishers, 1993. **c**
- Sabin, Francene. *Ecosystems and Food Chains*, Troll Ask. 1985. **c\***
- Sabin, Francene. *Swamps and Marshes*, Troll Assc., 1985. **c\***
- Soffer, Ruth. *Swampland Plants and Animals Coloring Book*, Dover Publishing, 1997. **c\***
- Whitman, Sylvia. *This Land is Your Land, The American Conservation Movement*, Lerner Publishing, 1994. **a**
- Wong, Herbert H. *The Backyard Detective: A Guide for Beginning Naturalists*, Nature Vision, 1993. **a**

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