

Created by Jenny Willmer
Third Grade Science -Animals and Their Habitats

Mangrove Ecosystem

(Habitat, food chains, habitat destruction, map skills)

Michigan Benchmark 5: Ecosystems SCI.III.5.E.1 food chain
 SCI.III.5.E.2 interdependence
 SCI.III.5.E.3 habitat needs

Goal # 2 The student will know that organisms have basic needs and use food for energy.

Objective:

- a. know that a place where animals lives is called its habitat

Goal # 4 The student will know simple food chains.

Objectives:

- b. state that a food chain is a system in which an animal eats a plant or animal and then is eaten by another animal.
- c. draw diagrams of food chains.
- d. compare animals and tell whether they are predator or prey in any given food chain.
- e. name several predator-prey relationships.

Goal # 6 The students will know the relationship between producers, consumers and decomposers.

Objectives:

- a. describe a food chain.
- b. draw a food chain.

Map skills, vocabulary development, writing with dialogue,

Materials: The Sea, the Storm and the Mangrove Tangle, by Lynne Cherry
(insert ISBN # 0-374-36482-6)

Tides video clip of mangrove

Pictures on Tides (mangrove, egret, heron, flamingo, termite mound--
Celestun and High Island 5 of 14 egret, 6 of 14 heron eating snake)

Lesson: Tell the children you are going to introduce them to a habitat with

which they may be unfamiliar. Write the word mangrove on a chart. Show the children the [Tides mangrove video clip](#). Generate discussion and chart responses. After gathering background information from the children, introduce the book. As you read the book out loud, ask children to think about the animals in this habitat and how they interact with each other.

As a class, list animals in the story (pelican tree crab, oyster, anemones, fiddler crab, tree snail, lizard, ants, mosquitoes, humming bird, seahorse, shrimp, snappers, grunts, fish, dolphins, manatees, heron frigate bird). At this time, show [Tides pictures](#) of animals from mangrove in Mexico and compare them with the story.

Review the words producer, consumer and decomposer with the class. Producer--sunlight is the primary source of energy for all members of any food chain. Producers-green plants- make energy from the sunlight. Consumers: eat plants or animals or both to get their food and energy. Decomposers: break down dead and decaying plants and animals for food and energy. Look for some of these relationships in the story. Together, map some of the food chains found in the book.

After discussion of the book, give the children the [worksheet](#) to complete, independently or in pairs.

Allow the children to choose from one of the following activities:

- A. Write a story with a mangrove as the setting.
- B. Pretend to be an animal from a mangrove. Tell about your life, using dialogue.
- C. Design a three dimensional model of a mangrove habitat.
- D. Write a letter for the preservation of mangroves.

Begin an ecology word bank with the class. Add to the word wall and vocabulary words: producer, consumer, decomposer, predator, prey, habitat, ecosystem, food chain, mangrove.

Extension activities:

Using the ecology vocabulary words, children can create ecological dictionaries, individually or a class set.

Create a crossword puzzle with these words, or use the [crossword puzzle](#)

provided.

<http://puzzlemaker.school.discovery.com/code/BuildCrissCross.asp>

Using a world map, have children locate the mangrove areas from the story (Florida) and the mangroves in Mexico. Compare to child's own location.

Create a class terrarium/aquarium. Observe the class created ecosystem.

Name _____ Date _____

The Sea, the Storm and the Mangrove Tangle

By Lynne Cherry

1. What are some of the animals you might see in a mangrove habitat? List at least five.

2. Draw two examples of food chains found in a mangrove ecosystem (Example: sea grass ~fish ~ flamingo).

3. In this story, a hurricane almost destroyed this ecosystem. What else could destroy a mangrove habitat?

4. What are some predators and prey you might find in a mangrove habitat?

Predator	Prey	Both