

Friend or Foe?



Overview

All living things have roles in the environment. Through discussion, activities, and games, students learn how the location of a living thing affects whether it is considered a pest.

Objectives

Students will:

- discuss what makes something a pest.
- learn that being a pest can depend on the situation or location.

Subjects

science, language arts, art

Materials

“When is a pest not a pest?” teacher sheet, green and red paper, markers or crayons, pencils, plain paper

optional: scissors, glue or tape

Duration

1 hour

Background

A pest is any living thing (plant or animal) that bothers or annoys us, our pets or animals, damages things we value, occurs where we do not want it, or causes or spreads disease. This is a pretty broad definition, and in fact people don’t always agree that something is a pest. A dandelion may be a pest to one person and a wildflower to another.

We spend a lot of time and money battling pests. It is important to remember that pests aren’t “trying” to hurt or bother us. All living things have roles in the environment. Depending on their roles in food chains and food webs, living things can be producers, consumers, predators, prey or decomposers. Each of these roles is important for food webs to function. But what happens when decomposers like termites infest your house? Decomposing old trees in the forest is important. Decomposing your house is a problem, and makes them pests.

Doing the Activity

Step 1: Discussion. Ask: *What is a pest? What are things that pests do that make them pests to us?* Key points include: bothers or annoys, damages things, occurs where we don’t want it, makes us sick. Ask: *What are some examples of pests?* Write the examples of pests on the board or overhead as the students suggest them. The first suggestions are usually brothers or sisters and insects. Encourage students to give examples of plants or mammals in addition to insects.

Step 2: Pest or NOT a Pest Game. Hand out green and red pieces of construction paper to each student. Have the students write “pest” on the red piece of paper and “NOT a pest” on the green sheet. Read examples from the “When is a pest not a pest” teacher sheet. Instruct the students to hold up the red sheet when they think it is a pest, and the

green sheet when they think it isn't. You may wish to start with silly examples like an elephant in your living room or a tree growing through the window into our classroom. With smaller groups you may choose to make one wall in the room "pest" and the other wall "NOT a pest." Instruct the students to run or walk to the correct wall.

Step 3: Craft Activity. Students choose one plant or animal. At the top of the page each student writes "Name of living thing can be:." Divide the bottom half of the page into two sections. On one section write "a pest" and on the other section write a useful purpose for the animal (food, pollinator, decomposer, etc.). Draw pictures for each option. One adaptation of this activity is to make flaps to go over the pictures. Cut out the flaps from another piece of paper and tape or glue the top edge to the paper.

A mouse can be:	
a pest	food

Step 4: Complete The Story. Start by saying a sentence about an animal to the class. For example, one day an elephant decided to go to the city. Go around the room and have each student add a sentence to the story. It can get very silly.

Closure/Assessment: Ask the students what a pest is and what makes it a pest. Give students examples of pests, and ask for suggestions on what to do. For example: If I find a ladybug in my living room what could I do? *Take it outside.* If I see poison ivy in the woods, what should I do? *Stay away.*

Enrichment

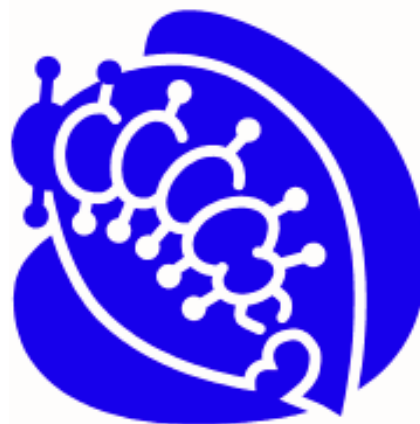
Ask students to write a story about an animal (real or pretend) that becomes a pest when it goes to the wrong place.

Supplemental Worksheets

From The Minnesota Department of Agriculture IPM Program, *Join Our Pest Patrol-A Backyard Activity Book for Kids- An Adventure in IPM* <http://www.mda.state.mn.us/IPM/IPMPubs.html>

1. What's a Pest? <http://www.mda.state.mn.us/IPM/PestPatrol/WhatsAPest.pdf>
2. Insect Pests and Pals <http://www.mda.state.mn.us/IPM/PestPatrol/PestsAndPals.pdf>

Answers: <http://www.mda.state.mn.us/IPM/PestPatrol/Answers.pdf>



When is a pest not a pest?

Teacher suggestions: The following are some examples for the *Pest or NOT a Pest* game in step two. As part of the activity, randomly read the name of an organism and where it is or what it is doing. Feel free to develop your own examples and embellish the ones below. For example, say: *a rabbit eating the lettuce in my garden.*

Name	Pest	Not a Pest
raccoon	In house, garage, garbage cans	forest
mosquito	biting us, spreading diseases	food for bats and fish
maggots	making meat or vegetables rotten	decomposing dead animals
termites	eating houses or buildings	decomposing wood in forests
rabbits	garden	field or woods
deer	in a cornfield, in your garden	forest
algae	covering a pond	food for fish
mouse	house, spreading diseases	food for snakes, other animals
fruit flies	inside flying around fruit	eating rotting fruit on the floor of an orchard
bees	sting us	pollinating flowers and making honey
lady beetle	inside your house	outside, eating aphids and other small insects
house fly	annoy us, spread disease	food for birds, decompose animal waste

Adapted from:

“When is a Pest Not a Pest” in Jeffords, M.R. & Hodgins, A.S., 1995. *Pests Have Enemies Too: Teaching Young Scientists About Biological Control*, Illinois Natural History Survey, Champaign, IL, special publication 18.