Focus Areas: Integrated Pest Management (IPM); Science, Language Arts, Graphic Arts

Focus Skills: summarizing, understanding the main idea

Objectives

• To illustrate an understanding of IPM
• To recognize the need for reduction of chemical applications in pest management

Essential Question

How can Integrated Pest Management reduce the use of chemicals in managing pests?

Essential Understandings

• IPM seeks to understand the lifestyle of a pest and determine the pest population before taking action.
• IPM applies the most environmentally sound methods to pest management.

Background

IPM offers a scientific approach as well as an alternative to indiscriminate chemical use in the management of pests. Combining identification and an understanding of the pest with a variety of environmentally friendly methods of management, IPM seeks to reduce the use of potentially dangerous chemicals among municipalities, families, and the farming community.

In a series of steps, the pest is identified, the impact of the pest population is estimated, and the choice of action is determined. Sometimes, particularly for the homeowner, the best choice is NO action.
For example, spotting several Japanese beetles feeding on rose bushes would not justify taking action, particularly when the action could make the problem much worse. Homeowners frequently purchase “traps” that have attractants for Japanese beetles. They can attract hundreds of beetles that will mate and produce many more beetles to infest your gardens.

So, while chemicals are not universally condemned, they are not the first choice for control. Thoughtful choices must be made, depending on the situation, the potential impact of the pest, and the damage it is capable of causing. When chemical control is deemed necessary as an IPM method, careful attention is given to the toxicity of the chemical, the amount applied, and the safety precautions required.

**Vocabulary**

- **biological control**: the use of natural enemies to control pest populations (ladybugs, bats)
- **chemical control**: the use of chemical powders, pellets, or sprays to control pests
- **cultural (common sense) control**: keeping areas and ourselves ‘pest-unfriendly’ (garbage collection)
- **IPM**: Integrated Pest Management, a method that seeks to manage pests in the most environmentally friendly way
- **mechanical control**: tools, machines, or equipment that aid in pest management (such as screens)
Unit 6 Lesson 1: There’s a Wiser Way

Logistics

- **Time:** 30 minutes
- **Group Size:** 5 to 30
- **Space:** an area for creative work

Materials

- 12” x 18” sheets of white paper
- crayons, colored markers
- 8” x 12” colored paper
- scissors, glue sticks
- Izzy puppet *
- The IPM Song *
- an area for writing that group can observe

* single copy provided

Preparation

1. Gather art supplies.
2. Review the **IPM Song**.
3. Print the heading **IPM Control** on the board/chart paper.
4. Beneath this heading, create three columns: **BIOLOGICAL**, **COMMON SENSE**, **MECHANICAL**.

Activity

Introduction

1. Using Izzy, review the group’s understanding of the heading and column categories.
2. Izzy asks volunteers to give examples of pest management for each category.
3. Izzy asks:

   a. Which other method of pest management could be added to this list? (chemical)
   b. Why should chemicals be our last choice for pest management? (They are dangerous!)
   c. Izzy sings the IPM Song with the children.

**Involvement**

1. Tell the group that they are going to create a poster urging people to use methods other than chemicals to control pests.
2. Brainstorm the vocabulary they might want to include on their posters.
3. Print words and phrases offered by the group on the board or chart paper.
4. Distribute art materials and allow time for the children to create posters.

**Follow Up**

1. Children display their posters and share why they chose to create these messages.
2. Posters are shared with others in a public place.