

Unit 1 Lesson 1: What is IPM?

Focus Areas: Pest Control; Science, Language Arts

Focus Skills: evaluating data, making generalizations, forming conclusions

***Dedicated
to Reducing
Pesticides***

Objective

- To understand the purpose and methods of Integrated Pest Management, IPM

Essential Question

What is IPM?

Essential Understanding

IPM is a program to reduce the use of chemicals to control pests.

Background

Because excessive use of chemicals poses an environmental threat, alternate solutions to pest control are both practical and necessary. IPM makes use of multiple tactics to control pests. These include biological, physical or mechanical, cultural, and regulatory controls. Chemical pest control is used only when less invasive methods are inadequate or ineffective. Furthermore, chemical control should be carefully monitored to minimize negative outcomes.

Note: Read the background on the Praying Mantis in order to help the group interview “Izzy” during the **Involvement** portion of the lesson.

Vocabulary

beneficial insect

an insect that eats other insects that are destructive

chemical

sprays, powders, pellets, or liquids that help control pests but may be harmful to people and the environment

IPM

a combination of ways used to control pests



University of
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College of Agriculture
and Natural Resources
Cooperative Extension System



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Logistics

Time: 30 minutes

Group Size: 5 to 30

Space: an area for comfortable seating

Materials



Izzy puppet *

copy of the *IPM Song* *

Supplement “Insecta Inspecta World - Praying Mantis” *

directions for “Munch Lunch” game *

small playing pieces (raisins or Cheerios) to represent the bugs for Munch Lunch game

small paper plates (one per child)

plastic tablecloth

* single copy provided

Preparation

Review the **Background** and the Supplemental fact sheet “Insecta Inspecta World - Praying Mantis”

Become familiar with the song and the game.

Activity

Introduction

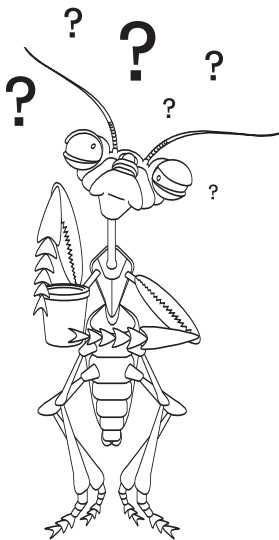
1. Introduce the group to the “Izzy” puppet as Izzy the Praying Mantis. Read or sing the first verse of the *IPM Song*.
2. Print Izzy’s name on the board using upper case letters for **I**, **P**, and **M**.
3. Point to each upper case letter, and as the children say it, print it beneath Izzy’s name to spell IPM. Read or sing the second verse of the *IPM Song*.
4. Tell the children IPM is a special way to control pests without hurting pets, people, good plants, and animals.
5. Ask the children if they would like to help Izzy and learn how IPM works. Read or sing the third verse of the *IPM Song*.



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Involvement

1. Allow the children to interview Izzy to discover why he is the mascot for Connecticut IPM. (He is a beneficial insect, the state insect, and considered by many to be the best hunter of all insects.) Use the puppet to answer questions. Focus on his hunting skills if you plan to do the **Follow Up** portion of the lesson.
2. Explain that many insects eat more harmful insects. This is one way to control pests without using pesticides that can hurt good bugs and other animals, harm plants, and pollute the environment.
3. Play the Munch Lunch game.



Directions for Munch Lunch, a math counting game:

1. Put the tablecloth on the floor and have the children sit in a large circle around it. Tell the children they are going to take turns pretending to be a beneficial (helpful) praying mantis.
2. Review what makes the mantis such a good hunter. (patient, fast, good eyesight, head can turn side to side, etc.)
3. Give each child a small paper plate.
4. Scatter the pretend “insects” on the tablecloth.
5. Recite the following verse, inserting a child’s name in the first line and a number in the second line:

_____, the praying mantis is hungry for his/her

lunch and captures ____ insects to crunch and munch!

As each child is chosen, he/she approaches the prey (encourage them to act like a mantis for added fun), snatches the correct number of insect treats, and puts the “insects” on the plate. Encourage the other children to chant the verse as the mantis “hunts.”



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Activity

Directions for Munch Lunch, a math counting game
(continued)

- When a child has captured his/her prey, he/she should hold up the “insects” one at a time while the group counts them.
Note: New “insects” are replaced in the circle as the numbers are depleted.

Variations: The child who is hunting may select the next praying mantis and number following his/her turn.

Two children may be selected at once to be the hunters to create a race.

Follow Up

What can you do if a pest is bugging you?

This introduces the **IPM** segment of the lesson.

- Review the concept that **CHEMICALS** should be the last choice for pest control.
- Discuss the following scenarios with the children:
 - You have weeds growing in your garden. (Dig them up...be sure to get the roots too!)
 - Bees are gathering nectar from your flowers. (Leave them alone.)
 - You have mosquitoes in your yard. (Dump all water not being used; wear long sleeved shirts and long pants if you go outside at night.)
 - You have mice in your kitchen. (Store food in tightly closed containers, keep areas clean where pets eat, don't let mouse nesting materials (like garbage, newspapers, or old socks) stack up, set traps, get a cat.)
 - You have flies in the house. (Make sure all screens are tight and have no holes. Don't leave outside doors open.)