

Leafy Spurge Activities

Bug Barf - Before and After Play Audio Track #9

(20 minutes)

Levels

Grades 3-6

Subjects

Science, Language Art

Skills

Interpreting, Identifying, Illustrating, Discussing

Concepts

Structure and functions of living things;
interactions among technology, science and society

Objectives

Students will learn the biology behind the leafy
spurge hawk moth and its host plant.
Students will learn life stages of the leafy spurge
hawk moth.

Materials (20 student class-size)

What's in Your World? CD audio track #9
(inside the back cover) - 1 per class
flash card of leafy spurge hawk moth - 1 per
student (inside the back pocket of the *What's In
Your World?* tool kit);
drawing paper - 1 per student; crayons/markers
hole punch - 1 per group (or class)

Time Considerations

Preparation - 5 minutes
Activity - 20 minutes

Lesson Overview

- Life Stages. Hawk Moth Points of Attack
(20 minutes)

Background

The Leafy Spurge Hawk Moth is also known as the
Horn worm when in its larval stage. It was the first
insect released in the United States to defoliate leafy
spurge. The hawk moth is not the most effective or
easily established biological noxious weed control
agent.

Much like a hummingbird, the leafy spurge hawk
moth behaves and feeds on nectars in the flowers.
One of its most interesting characteristic is its abil-
ity to store poison and use it as a defense against its
predators in the food chain.

*What would a hawk moth look like? Would it
have hawk-like wings or not?
How effective do you think "barfing poison" is
for leafy spurge hawk moth against its enemies?*

HAWK MOTH. HORN WORM STORED POISON LESSON DETAILS

STEP ONE. Ask the students to locate
the *Not All Alien Invaders Are Bad* Leafy
Spurge Hawk Moth flash card inside
the back pocket of the *What's In Your
World?* activity tool kit. (photocopies
will also work). Ask the students--*If you
were the hawk moth, how high would
you fly with those hawk-like wings to
get away from other larger predators?*
Ask the students to discuss how they
think the hawk moth got its name?
(describe what it looks like)

STEP TWO. Explain to the students
that like a hawk preys on small animals
in the landscape, other insects and ani-
mals prey on the leafy spurge hawk
moth. The hawk moth stores poison
and regurgitates it (barfs it) to stop its
predators in their tracks. If you think it
is appropriate you might allow the
students to draw what they think it
might look like after they draw the leafy
spurge plant in the next step.

STEP THREE. Pass out the drawing
paper, crayons and markers. Tell the
students to draw the leafy spurge plant
as large as they can on the drawing
paper. Explain that you will be releasing
the leafy spurge hawk moth (hypotheti-
cally) onto their drawings once they

complete them. Make the hole punch
available after the drawings are complete
and ask the students to punch holes in
their drawings where they think the leafy
spurge hawk moth would eat. (the leaves)

Ask the students-- *What other insects
have defense systems like the hawk
moth? Do plants have defense systems?*
Tell the students to list five plants or
insects that they believe have defense
systems. When they each have their list,
ask them one at a time to describe from
their list one insect or plant and its
defense system.