







Feast Like A Bug

Many people think of insects in their garden as a bad thing. While some insects can be harmful or annoying, others are helpful. Some insects eat your plants while others eat the plant eating insects. The trick is to find a balance between the harmful insects and the helpful ones.

Helpful Insects	Harmful Insects
 <p>Lady Bug - Lady Bugs will eat insect eggs, mealybugs, whiteflies, plant, and spider mites as well as small larvae from any other insect.</p>	 <p>Aphid - Aphids pierce and slurp the juice out of the plant's leaves and stems.</p>
 <p>Bee - Bees pollinate your flowers, vegetables, and fruit trees as they move from flower to flower.</p>	 <p>Cutworm - Cutworms eat plant seedlings off at the soil line.</p>
 <p>Ant Lion - Ant Lions create pits to capture ants and other crawling insects.</p>	 <p>Mealybug - Mealybugs feed on plants and take the life out of them.</p>

Use What You've Learned!

Name these Insects and Circle if they are :

Helpful OR Harmful













Insect Word Bank

Aphid

Lady Bug

Butterfly

Cutworm

Bee

Career Corner

Wildlife Biologist - Wildlife Biologists get to know the Earth on her terms. They go into the field and analyze the impacts and roles organisms play in the environment. This career involves being outside and interacting with ALL aspects of the natural world.

How Wildlife Biologists Benefit Agriculture:

- Share their knowledge of the natural world
- Care for nature that affects farmers

Wildlife Biologists Study:

- Wildlife Courses
- Biology



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The Truth Behind Lightning Bugs

What you will need:

- | | | |
|------------|-----------|-----------------|
| ~ Net | ~ Bug Jar | ~ Digital watch |
| ~ Paper | ~ Pen | ~ Flashlight |
| ~ Aquarium | ~ Mesh | |

Step 1: Use a net to capture a firefly.

Step 2: Place the firefly in the bug jar and observe.
 Which part of its body produces the light? _____
 What color is the light? _____

Step 3: Use your digital watch to log the time between flashes. Do this for 10 minutes.
 What is the average amount of time between flashes? _____

Step 4: Now shine a flashlight on your firefly. Log the time between flashes. Do this for 10 minutes.
 How does shining the light affect the bug's flashes? _____

Step 5: Obtain more fireflies, and place them in an aquarium covered with mesh.
 Are there any patterns to their flashing? _____



What's Really Happening??

The firefly is a beetle that produces light in its abdomen. It produces the glow from a chemical called luciferin. Fireflies regulate the light by controlling how much oxygen reaches the luciferin. Different species use different light-flashing patterns. The main purpose of the light seems to be to attract mates. If you shine a light on the bug, it will either light less frequently or not at all.



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