Activity 27: Ladybug Lunchline

Objective: Determine the valuable effect of ladybugs to the garden

Time: 30-40 minutes



Materials: 1 clear film canister per child, plastic aquarium tubing or flexible drinking straws, hand-held single-hole puncher, gauze and modeling clay

NOTE: Before beginning, do a little bit of research to find the three most common harmful garden insects for your area. You can find that information by contacting your local county Extension office, a local garden center, or speaking with a neighborhood garden expert! Use reference materials, online sources and resource links at <u>www.jmgkids.us/wildlifegardener</u>

Ladybugs are considered beneficial insects; they eat insects that are harmful to our garden plants (like aphids, mealybugs and scale). Explain the concept of beneficial insects to the gardeners. Share images of your community's common garden pests. Discuss the fact that many people dislike insects and the word "insect" makes most people think of creepy, crawly, disgusting bugs. Point out that many, many insects, like ladybugs, are beneficial. In fact, tiny ladybugs can eat up to 60 aphids per day—which is a lot considering the size of a

ladybug! Have students create a cumulative daily count over a two-week period of the number of aphids a ladybug could consume (day 1, 60 aphids, 2-120, 3-180, 4-240, etc.).





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The white, translucent film can sters work best for this activity and can be obtained free from a local film processing office.

Tell the JMGers that they are going to be beneficial insects.

Have each person make a bug sucker by following these steps:

1. Punch one hole about halfway down the side of a film canister using a handheld hole puncher. Punch another hole across from the first.

2. Place a 1 inch piece of gauze over one of the holes and insert a 3-4 inch piece of tubing in the hole. *The gauze acts as a very important filter.*

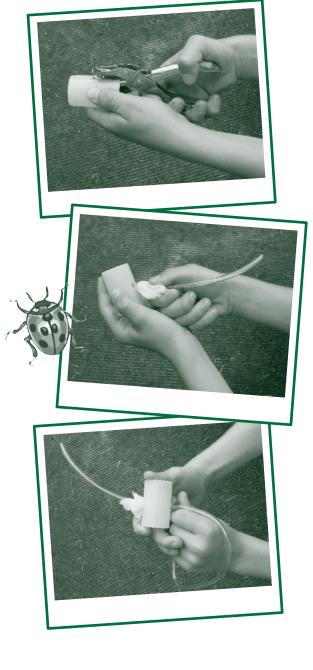
3. Measure, cut and insert an 8-12 inch piece of tubing in the second hole and seal around the tube and hole with a small amount of modeling clay.

4. Cap the film canister.

Tell the group that they have created `a bug sucker, also known as an insect aspirator. Explain that an insect aspirator

is a piece of equipment that scientists use to collect insects. It's especially good for insects that are very small, very fragile, or might even be able to sting such as an ant.

Take the group outside with their bug suckers. Tell everyone that they are going to try to be beneficial to plants like a ladybug. They should try to "eat"







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as many insects as they can by sucking them through the tubing into the film canister. But, they should be sure to "eat" only harmful insects. Give the group 5-10 minutes to "eat" insects. Discuss some basic safety rules such as to be careful to avoid stinging insects (it's a bad idea to stick a bug sucker near an ant bed!)

Afterwards, go back inside and inspect the insects that have been collected. Count how many harmful insects each person has "eaten." Remind the group of the fact that a ladybug, roughly the size of of one of their fingernails, can consume 60 aphids in one day – a natural pest control!

If needed, revisit reference materials and online resources at <u>www.jmgkids.us /</u> <u>wildlifegardener</u> to identify any unknown captured insects and to find out if they are harmful or beneficial in the garden.

