Spiders, Our Garden's Friend!

Overview: Children talk about the benefits of spiders in our garden, and then explore spiders up close. They will learn the basic parts of a spider, and try to find these parts on live spiders that they find in the garden.

HEALTHY YOUTH PROGRAM

Fitness & Nutritio

Subject area: Backyard Science

Grade level: K-5th

Objectives:

Children will be able to list at least two good things that spiders do in the garden. Children will be able to identify the parts of a spider.

Prep time: 10 minutes

Lesson time: 25 minutes

Materials needed:

- A copy of the handout "Spiders, Our Garden's Friend!" for every child, or one handout for every two children (see the handout below on page 3)
- Magnifying glasses (one for each child, or one for every two children)
- Bug nets, optional (one for each child, or one for every two children); for instructions on how to make a homemade bug net, visit: http://blog.imaginechildhood.com/imagine-childhood/2009/08/nets-for-butterflies-and-other-friendly-insects.html
- Insect collection jars or containers, with lids (one for each child, or one for every two children); ideally, these containers would be clear, so spiders could be observed inside, with the lid on.

Space needed: Garden

Staff needed: 1 staff to teach the lesson and help children in the garden (if group is larger than 10, an additional staff member would be helpful)

Preparation steps:

Have materials ready.

Pre-test of knowledge:

- Ask children if they think spiders are helpful or harmful for the garden. (Overall, they are quite helpful!)
- Ask children what they think spiders do in the garden. (Catch insects they often catch harmful garden insects – and eat them; spin webs; dig tunnels; they are also food for larger garden critters, like grasshoppers)

• Ask children if spiders are insects? (No, they are not; they are Arachnids. There is more information about Arachnids on the handout)

Presentation steps:

- 1. Ask the questions listed in "Pre-test of knowledge."
- 2. Use these questions to generate a conversation about how spiders actually help our garden, and how they are not truly insects. For anyone who is afraid of spiders, explain that spiders are *much* more afraid of people than we are of them! They help the garden, so we could consider them our friends. Also explain how interesting they are to observe, especially if you are lucky enough to find one building a web!
- 3. As you pass out the handouts, you could say, "There are many interesting facts about spiders let's take a look at the parts of a spider more closely and see if you find out something you didn't already know!"
- 4. Go over the handout with the children; you can have different children read about each part of the spider out loud as others follow along.
- 5. Pass out bug nets, magnifying glasses, and containers. Ask children to find spiders in the garden and capture them using the nets (or just using the containers). *This is a good time to review humane treatment of all living things in the garden.* When a child or group of children has captured a spider and put it in their container, have them observe the spider and look for the parts of the spider that they learned about from the handout. They can use the magnifying glass if desired.
- 6. Release all spiders at the end of the lesson.

Variations:

If you have access to a laptop computer and a digital microscope, this is a neat activity to use the microscope to really get a close-up view of the spiders.

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Here are some differnt parts of a spider - see if you can identify these parts when you observe spiders in the garden

