



Mini-Field Trip

Introduction

In the book *On One Flower: Butterflies, Ticks and a Few More Icks*, author Anthony Fredericks goes on a "field trip between covers" to a single goldenrod plant and reveals the remarkable variety of insects that may be found there. Many other plants besides the goldenrod are host to insects. In this activity students will sharpen their powers of observation by closely inspecting a plant.

Materials Needed

- ◆ *On One Flower: Butterflies, Ticks and a Few More Icks* - by Anthony Fredericks
- ◆ Notebook and pen or pencil

Procedure

1. Read *On One Flower* as a class to show how a single plant can be a host to a variety of insects.
2. Ask the students whether they have noticed bugs on plants. What kind of bugs? On what kind of plants?
3. Decide what outdoor plants to observe. Alert students to the fact that their presence may impact whether the bugs will be there or not; for example, butterflies or other flying insects may not approach a plant if humans are nearby, especially if they are moving. Also alert students that they will have to observe all parts of the plant very carefully.
4. Observe the plants for a predetermined period of time. Encourage students to make note of what they see, or draw what they see.
5. Reconvene and share findings. Try to identify as many of the insects as possible. Try to determine why the bugs are there. Is the plant itself a source of food or shelter? Are other insects on the plant as a source of food? Are there other reasons for the bugs to be there? (For example, a place for spiders to spin a web and catch insects, or a place to lay eggs.)

Key Concepts

- ◆ Plan and conduct a simple systematic observation or investigation.
- ◆ Use knowledge and evidence (data) to formulate explanation.
- ◆ Communicate or analyze investigations and explanations that might be drawn or spoken as well as written.

For standards correlation please see our website.

Nature Connections

◆ After students have read this book invite them to discuss some of the similarities and/or differences between the community of animals on the flower and the community in which they live. Students may be interested in creating a large poster which illustrates those differences/similarities.

◆ After reading the book, ask students to survey other youngsters in the school about their favorite insects. Which ones are the most "popular"? Which ones are the least "popular"?

Additional Resources

New York Botanical Gardens
<http://www.nybg.org/gardens/>

Denver Botanical Gardens
<http://www.botanicgardens.org/>

San Francisco Botanical Garden
<http://www.sfbotanicalgarden.org/>

Desert Botanical Garden
<http://www.dbg.org/>

United States Botanic Garden
<http://www.usbg.gov/>

