



Outdoor Biology Instructional Strategies

PLANT HUNT

OVERVIEW

This activity is designed to develop interest and skill in sampling populations. A **population** is a group of organisms of the same kind that live and reproduce in a given area.

Participants in the hunt investigate the diversity of plants in a selected area. Using egg cartons, the group collects parts of plants. By combining the evidence from the teams' collections into one large collection, the group observes differences in the various plants found in the study area. The results are used in developing the concept of species. For our purposes, **species** is used to denote each different kind of plant found.

CHALLENGE

Find as many different plants as you can in a study site.

MATERIALS

For the group:

25 paper or plastic cups (margarine or cottage cheese containers are fine.)

For each team (3 to 5 participants):

Lawn Guide

2 egg cartons

Hand Lens

PREPARATION

Select a site for the hunt; avoid sites with rare, delicate, or unusual plants. A lawn, vacant lot, open field, or other area where there is a variety of plants is suitable. Clearly mark the boundaries of the site before the hunt begins. The entire activity can be carried out in forty-five minutes. Allow fifteen to thirty minutes for the investigation of the site, the collection comparison, and sorting of samples. Based on observed interest, increase or shorten this time.

ACTION

1. Organize the group into teams of three to five participants.

- Give each team two egg cartons and a hand lens.
2. Define the boundaries of the study site.
 3. challenge each team to find and collect as many different kinds of plants as they can on the site. You may make it a contest among teams.
 - a. Two leaves, or pieces, of each different kind of plant are collected.
 - b. One piece is placed in a compartment of the team's egg carton. The other piece is placed in one of the paper or plastic cups. Set the cups out in the middle of the site. If two teams collect parts of the same plant they should place the parts in the same cup. Each cup should contain only one kind of plant. In this way, all the different plants collected by all teams are combined and sorted in the cups.
 4. Observe and discuss each team's findings.
 - a. Discuss whether each piece of plant in a team's collection is from a different kind of plant.
 - b. Using hand lenses and comparison of whole plants, resolve disagreements where possible.
 - c. Observe and discuss whether each cup in the center contains a different kind of plant. Use hand lenses to help decide.
 5. Introduce the term **species**. Individuals and teams will disagree regarding whether or not certain plants in a team's collection are the same or different kinds. This is a good time to introduce the concept of species and to emphasize that some disagreements cannot be resolved. Each different kind of plant found is identified as a separate species.
 6. Distribute OBIS *Lawn Guides* and have the group compare plants collected with those pictured in the guide. Many participants will enjoy finding names for the plants they have found.

FOLLOW THROUGH

1. Interested participants can further identify their collected plants by using standard biological keys and plant guides.
2. Compare the diversity of plants found at different times of the year or after a rainy or dry period.
3. Search for additional plants on the site. What was missed?
4. Conduct a plant hunt in two different environments such as a lawn and a meadow; compare results.

WHAT TO DO NEXT

Bean Bugs

Animals in a Grassland

Plant Distribution Patterns

Plants Around a Building