

INTRODUCTION

The idea that plants have particular places where they prefer to live, and even particular plants with which they live congenially in communities, may seem a paradox. No plant, after all, exercises a willful choice as to where its seeds fall and germinate. Wind-borne, bird-borne, carried in water or by mammals in their fur, seeds seemingly face a haphazard distribution. Yet there is no doubt that plants grow only in particular places, whether these be the rock to which some lichen clings, the treetop to which some climbing vine laboriously makes its way, or even a host which provides a parasite with what is needed. Nor is there any doubt that plants live in specific communities with definite boundaries. We've all seen how abruptly a forest gives way to prairie or meadow.

Part of the reason for this apparent choosiness of plants lies in requirements of light, moisture, temperature and soil condition. If distribution depended only on these factors, many species would be far more widespread. As it is, we find that a forest undergrowth of pines is different from that of a hardwood forest. When we analyze these differences, patterns of definite plant communities emerge. The reasons why plants grow in communities are only partly known. One interesting aspect is that certain plants definitely inhibit others. In a plant-like way, they are antisocial. There are plants which help other plants to grow better. Clover, a well-known example, contains bacteria which cause the growth of its root nodules to fix nitrogen from the air, thus producing nitrate fertilizer, which benefits not only clover but any other plants as well.

We gain a better understanding of plants by observing their habitats and seeing how they fit into the world as a whole. The following activities offer a guideline for learning how to observe plants and for gaining a better understanding of plant needs, adaptations, communities, and management.

THE ACTIVITIES

TIME REQUIRED

Define and Locate Plant Communities	30 minutes with discussion
Map Plant Communities and look at Plant Distribution	60 minutes
Study of a Single Plant	45 minutes
Plant Influences, Functions and Values	60 minutes
Dramatize Plant Roles	20 to 30 minutes



COMBINING THE ACTIVITIES

The activities in this unit are displayed singly. Depending upon the time available, and the skill of the participants, you may choose to do only one activity or the entire series. For maximum learning, do the activities in the order listed in the unit, however, other suggestions are:

Suggestion 1

Title: Define and Locate Plant Communities/Map Plant Communities and Observe Plant Distribution/ Study of A Single Plant/ Plant Influences, Functions and Values/ Dramatize Plant Roles.

Introduction: We will examine plants, their relative locations, and how the plants effect and are affected by various factors, including people, in their environments. We will then look at the roles, functions, and values of the plant communities and develop some guidelines about the use and protection of plant communities within an ecosystem. We will conclude by looking at ways that plants may function or have roles similar to individuals in a human community.

Transition Statement: Now that we have used our sense of vision to identify some plant communities, let's develop some skills in mapping individual communities.

Activity: Map Plant Communities and Observe Plant Distribution.

Transition Statement: Plant communities are composed of individual plants.

Let's look at characteristics of some of the dominant plants in our plant community.

Activity: Study Of A Single Plant

Transition Statement: We have now located several plant communities, looked at how individual plants are distributed and drawn composite maps of the communities. Now let's investigate the affects the study plants have on the rest of the plant community, and ways your plant community has been effected by people and other factors.

Activity: Plant Influences, Functions and Values

Transition Statement: Another way of communicating how plants relate to each other is by role playing.

Activity: Dramatize Plant Roles

Suggestion 2

Title: Study Of A Single Plant/ Map Plant Communities and Observe Plant Distribution/Plant Influences, Functions and Values/Define and Locate Plant Communities/Dramatize Plant Roles.

Introduction: The activities we will be involved in focus on plant adaptations and how these adaptations relate to the distribution of certain plants. We will examine the plants, their relative locations and how the plants effect and are affected by various factors in their particular environments. We will then look at the roles, functions, and values of the plant communities within an ecosystem.



Transition Statement: Now that we have examined the characteristics of individual plants, let's develop some skills in mapping the location of the plants in their natural habitats.

Activity: Map Plant Communities

Transition Statement: We have gathered information about some plant characteristics and the distribution of plants on our study plots. To help us identify some of the relationships that exist among our plant communities we will prepare visual displays of the study plots and look for similarities and differences.

Activity: Look At Plant Distribution

Transition Statement: We have now located several plant communities, looked at how individual plants are distributed and drawn composite maps of the communities. Let's investigate the effects the study plants have on the rest of the plant community, and ways your plant community has been affected by people and other factors.

Activity: Plant Influences, Functions and Values

Transition Statement: Another way of communicating how plants relate to each other is by role playing.

Activity: Dramatize Plant Roles

CURRICULUM RELATIONSHIPS

Social Studies

1. Find out which plants have played an important role in the history of your area. What were they used for? What changes in human history did they cause, if any?
2. Investigate the importance of plants to the Native American populations in your area. What economic, social or religious value do plants have?
3. Investigate what plants are important to the economic stability of your state, if any. Has the economic value of these plants always been the same? Are changes in the future? How? Why?
4. Investigate if changing land uses have affected the plant communities in your area. How have increasing numbers of people affected plant communities?
5. Investigate the threatened or endangered species of plants in your state. How did they get listed? What is being done to insure that they will not become extinct?
6. Investigate your state flower and state tree. How and when were they nominated? Tell about them in an oral presentation of your choice.

Science

1. Set up transects to inventory plants near your schoolyard or outdoor site. How does plant diversity here compare with the diversity in natural communities?
2. Compare aquatic plant communities to terrestrial plant communities in your area. What defines the boundaries between aquatic plant communities?



3. Help create an area for native plants near your school. How do these differ from those used to landscape peoples' houses in your area?
4. Investigate the life cycles of different types of plants.
5. Find out the effects of different concentrations of herbicides and fertilizers on plants. How does air or water pollution affect plants?

Mathematics

1. Inventory plants on a local golf course, the schoolyard lawn and a wild area. Plot this information on a graph to determine the influence of people on species diversity.
2. Measure the size of plants in your garden. Calculate the average size of a particular species of plant.
3. Estimate the number of seeds that will be produced by a common garden plant, such as a marigold. Scatter the seeds in a flower box and estimate how many will germinate. Compare your estimates with actual counts.
4. Grow some plants in your classroom. Graph the growth rate of the plants, the number of plants that germinate and the number that survive to maturity.

Language Arts

1. Write a poem or a song about your favorite plant.
2. Visit a botanical garden or local nursery and write a story that takes place in that area.
3. Learn new plant related vocabulary such as pistil, stamen, petal, pollen, fruit, community, association, etc. Use these words to write a story or a song. Include these words in a spelling or vocabulary list.
4. Read poems, stories or novels in which real or imaginary plants are important to the plot. e.g. Dr. Seuss, 'The Lorax.'

Creative Arts

1. Keep a sketchbook of plants you see in your neighborhood.
2. Create a poster of plants that are economically important in your state.
3. Draw a mural depicting the plants and flowers around your school. Use only natural materials.
4. Use different media to create postcards, bookmarks or note cards with plant themes.
5. Make leaf print T-shirts as gifts for family or friends.
6. Make a sculpture of some native species of plants.
7. View artwork and sculpture from different times and cultures that portray plants or natural environments containing plants. What can you tell about the artist's attitude toward plants or his/her understanding of ecosystem concepts by looking at the art? Do not forget to include cave art, Native American symbols and sand paintings, painting and sculpture by early American pioneers, Renaissance painting, and African, Oriental and East Indian art.



DEFINE AND LOCATE PLANT COMMUNITIES

CONCEPT	Organism, Population, System, Perception
PRINCIPLE	This activity gives participants the opportunity to discuss new terms related to the environment, visually select different plant communities and predict and compare communities' differences.
OBJECTIVE community, ent	<ul style="list-style-type: none">• The student will be able to define population, community, plant community and ecosystem.• The student will be able to differentiate between different plant communities.• The student will be able to list the components of an ecosystem.
PREPARATION	Locate the group adjacent to the boundaries of three different plant communities such as a north and south slope and a riparian zone in between. Decide on some physical limits. The base location is an important consideration for participant comfort and satisfaction. Attempt to choose sites that do not require the participants to walk too far, or back and forth too often.
MATERIALS NEEDED	<ul style="list-style-type: none">• 2' x 3' cardboard with flip chart paper attached• definitions of population, community, plant community and ecosystem on flip chart paper
PROCESSES USED	<ul style="list-style-type: none">• Observe• Infer• Define operationally
TIME	30 minutes with discussion



DOING THE ACTIVITY (outdoors)

A. Set Stage

We will be discussing some terms that are important to our understanding of this environment. We will also be selecting plant communities that we may wish to investigate. Make sure you are sitting where you have a clear view of this environment.

B. Procedure

1. Pre-investigation Discussion (10 minutes)

In order to make sure we all interpret the instructions for the following activities in a similar fashion, there are certain terms we should understand.

NOTE: record answers as they are given on the flip-chart.

a. What are some things you think of when you hear the word population? community? plant community? ecosystem? Give people time to think. Accept all reasonable answers. Below are definitions of each word.

1. Population: A group of a single kind of organism.
2. Community: A group of people with common characteristics living together within a larger society. [or populations of organisms interacting with each other].
3. Plant Community: An association of plants, each occupying a certain position, inhabiting a common environment and interacting with each other.
4. Ecosystem: Communities of organisms interacting with each other and the physical environment.

b. Ask, In addition to plants, what other things may be found in ecosystems? Record responses.

Possible answer might be: Soil, water, air, decomposers, insects, animals, (birds, mammals, insects, people, etc), energy sources/ flow, rocks, etc.



2. Instructions: Begin activity (5 to 7 minutes)

From where you are sitting, take 3 to 4 minutes to look around and identify nearby areas (within 200 feet) that appear to support different plant communities. Write your ideas down, then discuss your observations and ideas with other students. You have about 5 minutes.

C. Retrieve Data

Discuss student observations.

1. What are some areas that appear to support different plant communities? Record whole groups observations as before.
2. Refer to the list just generated. Which of the sites appear to show the most significant differences? Why do you think so?
3. If the next activity is to be done, let the group decide which three sites they would like to investigate further.

CLOSURE Identifying different plant communities here, what can we say about plant distribution?

TRANSITION In the next activity we will be mapping plant communities you just selected.

MAP YOUR PLANT COMMUNITY AND LOOK AT PLANT DISTRIBUTION

CONCEPT	Quantification, Organism, Population, Perception, Scale, System
PRINCIPLE	This activity gives students the opportunity to estimate spatial relationships and map the distribution of selected plants in their environment.
OBJECTIVE	<ul style="list-style-type: none">• The student will be able to identify, map and inventory a plant community.
PREPARATION	Students should select three distinct plant communities for this study. Place a transpiration bag over a sample plant as a demonstration.
MATERIALS NEEDED	<ul style="list-style-type: none">• Activity Sheet A: <u>Map Your Plant Community</u> and B: <u>Look at Plant Distribution</u>• 3 rolls of flagging, each roll a different color• 24 clear plastic bags - various sizes (ziplock or regular with ties)• 12 marking pens in assorted colors• (3) 2' x 3' cardboard flip charts with paper [paper with squares works best]
PROCESSES USED	<ul style="list-style-type: none">• Hypothesize• Observe• Measure• Use numbers• Communicate• Infer• Classify
TIME	60 minutes



DOING THE ACTIVITY (outdoors)

A. Set Stage

In this activity, we will start the process of determining plant distribution in plant communities. We will lay out plots and map the plants growing there.

B. Procedure

1. Divide students into three groups; one group per area to be studied. Ask groups to choose an area to study or assign an area.
2. Demonstrate the proper way to bag a plant to collect transpired water. (you have already bagged one plant in teacher preparation; this is a second plant on which you demonstrate the technique).
3. Distribute Activity Sheet A, flagging, plastic bags, and ties.

ACTIVITY A: Map your plant community 30 min.
groups

1. Select a representative area, mark the boundaries (corners and mid-points) of your plot with flagging. The plot should be twelve steps square.
2. As a group, decide upon the most significant or most characteristic plants of your plot.
3. Each person should choose one of these as a primary study plant to map, describe, and mount, and a secondary study plant if so instructed by your teacher.
4. Place a plastic bag over your primary study plant. You will use these plants later.
5. Working individually, map the location of all occurrences of your study plant. Develop your own plant symbols.

←----- 12 steps -----→

Primary Study Plant (Name) _____ (Symbol) _____

Primary Study Plant (Name) _____ (Symbol) _____

Investigating Your Environment
Plant Relationships 

4. Instructions: Go over instructions with groups before they go to their plot.

- a. Select an area within your specific plant community which appears to be representative of your community.
- b. Use colored flagging and lay out a plot that is 12 steps by 12 steps.

NOTE: If this group has laid out a plot in another investigation, they may use that method, or you may have them measure a plot of specific dimensions. Tell the students that the points to flag are listed on the activity sheet.

- c. Once plot is established and marked, as a group, determine the plants that seem to be most significant or characteristic of your site.
 - d. Each team member should select one of these plants as a primary study plant to map. A secondary study plant may be included if time allows. If possible, the plants chosen should not be the same as those chosen by another team member.
 - e. Place a plastic bag over your primary study plant. This was demonstrated for you earlier. Instructions also appear on Activity Sheet A.
 - f. Now work by yourself to map the location of all occurrences of your plant on your study plot. Use Activity Sheet A. Follow instructions on your activity sheet. Also map significant features such as rocks, fallen logs, fences or streams.
 - g. Finally, after individually mapping your study plants, work with the other team members to make a representative map of all of study plot plants on a large piece of flip chart paper provided. Your group will give a three to four minute presentation describing your map and the distribution of the study plants. Involve at least two team members in the presentation.
5. Give students at least 30 minutes to do the activity. Teacher/facilitator circulates, monitors, adjusts, and checks for understanding.

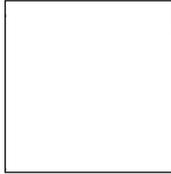


ACTIVITY B: Look at Plant Distribution

Individual

As presentations are made, please characterize each plot by sketching general plant patterns that you see.

1st Plot



Thoughts : _____

2nd Plot



Thoughts : _____

3rd Plot



Thoughts : _____

Investigating Your Environment
Plant Relationships 

C. Retrieve Data

1. Hand out Activity Sheet B while teams are laying their large-scale maps side by side.
2. Each team makes their 3 to 4 minute presentation. They should describe the plants they investigated. If another team studied the same plant, they should agree on a common symbol so composite maps in Activity B are comparable.

3. Continue until each team has reported. Have the students look for some patterns (similarities and differences) among the plots as the groups present findings. Tell students that they will be deducing reasons for the differences between the various study sites. To help accomplish this, have students record information from the presentations on Activity Sheet B.
4. Discussion during data retrieval should include the following thoughts: (Allow about 20 minutes)
 - a. What did you notice about the plots?
 - b. Which plots seemed to have the most plants? The most different plant species?
 - c. What factors could have led to the distribution of the plants on these plots?
 - d. What similarities and/or differences did you notice between plots?
 - e. Which plant communities were the most similar? Why?
 - f. What patterns seem evident after listening to the presentations and viewing the composite map?

CLOSURE

From our investigation, what factors have influenced the patterns of plant distribution we observed today?

TRANSITION

Now that we have looked at the distribution of plants on your study plot, let's focus on the characteristics of an individual plant.



STUDY OF A SINGLE PLANT

CONCEPT	Organism, Evolution, Interaction, Population
PRINCIPLE	Characteristics of plants can be described without knowing the plant's name or having a vast knowledge of botany.
OBJECTIVE	<ul style="list-style-type: none">• The student will be able to describe and record the characteristics of a plant.• The student will be able to infer how plant characteristics make the plant more suited to specific environments.
PREPARATION	Find an area with an abundance of plants. The plants should be common enough so that removing a few specimens will not disrupt the environment.
MATERIALS NEEDED	Equipment per group: <ul style="list-style-type: none">• Tape measure or ruler• Two sheets of contact paper or one roll of clear packing tape (2-3" wide)• 2 pair of scissors• 6 pieces of absorbent mounting paper (inexpensive drawing paper)• Activity Sheet C: <u>Study of a Single Plant</u>• Garden trowel• Soil or air thermometer• 1 increment borer, if trees present (share among all three groups if needed)
PROCESSES USED	<ul style="list-style-type: none">• Observe• Measure• Infer• Predict• Communicate• Use numbers• Classify• Hypothesize



TIME 45 Minutes
DOING THE ACTIVITY (outdoors)

A. Set Stage

A plant's structure often relates closely to the type of habitat in which it is found. In this activity you will be noting some general characteristics and the typical location of a plant.

B. Procedure

1. Distribute Activity Sheet C to students. Have them use the equipment provided to investigate further one plant from their study plot. They are to work individually to complete Activity Sheet C. Allow 30 minutes.

30 min.
individual

ACTIVITY C: Study of a Single Plant

1. Working individually, describe the following information about your primary and secondary study plants.

Describe the following:	Primary Plant	Secondary Plant
a. TYPICAL LOCATION (sun/shade)		
b. BRANCH PATTERN (describe or sketch)		
c. KIND OF LEAF (sketch)		
d. ROOT SYSTEM (sketch)		
e. REPRODUCTIVE BODIES (describe or sketch)		
f. APPROXIMATE AGE		
g. MAJOR FEATURES		
h. RELATIVE SIZE		
i. NAME: DESCRIBING MAJOR FEATURES		
j. COMMON AND SCIENTIFIC NAME (look up later)		

2. Prepare a specimen of your primary study plant.

3. If time and materials are available, prepare a specimen of your secondary plant; record information for later use.

Investigating Your Environment
 Plant Relationships 



2. **NOTE:** At this point, tell students if they are also further investigating a secondary plant.
3. Show students a prepared mounted plant sample. Remind them to disturb the environment as little as possible. Show them where and what mounting materials they can use. Instruct them to bring plant(s) back here to mount.
4. Instruct students to meet back at the central site by (time, within so many minutes, at sound of the whistle, etc.). Allow 30 minutes.

C. Retrieve Data

Conduct a discussion. Ask the following questions:

1. What did you find?
2. What were some typical locations in which you found your plants?
3. What kind of leaves (root systems, branch pattern, reproductive bodies) did you find on plants located in sunny areas? shady areas? wet areas? dry areas? etc.
4. How do the plant features relate to typical location? How might plant features change if, over a long period of time, the plant's environment changed? (This question may need specific information, e.g. if the environment became drier, colder, wetter, etc.)

CLOSURE How can we summarize what we have learned about the adaptations plants make to their environment?

TRANSITION Now that we have looked at the characteristics of individual plants, let's investigate how plants influence their environment.

PLANT INFLUENCES, FUNCTIONS AND VALUES

CONCEPT	Cause/Effect, Change, Interaction, System, Organism
PRINCIPLE	Organisms both effect and are affected by their environment.
OBJECTIVE	<ul style="list-style-type: none">• The student will be able to list three ways a plant community is influenced by other factors, natural and human caused.• The student will be able to list three ways plants influence other things.
PREPARATION	An area with several distinct plant communities.
MATERIALS NEEDED	<ul style="list-style-type: none">• Activity Sheet D: <u>Influence of Plants</u>, E: <u>Influence on Plants</u>, F: <u>Plant Community Tour</u>.• Pens or pencils
PROCESSES USED	<ul style="list-style-type: none">• Observe• Infer• Interpret data• Communicate• Question• Hypothesize
TIME	60 minutes



DOING THE ACTIVITY (outdoors)

A. Set Stage

We have now located several plant communities, looked at how individual plants are distributed and drawn composite maps of the communities. We will now investigate the effects the study plants have on the rest of the plant community and look at ways your plant community has been affected by other factors.

B. Procedure

1. Students may work in the groups they were in for activities A and B, or choose new groups. Hand out Activity Sheets D, E, and F.
2. Give the following instructions, allowing for questions.
3. Using Activity Sheet D, return to your plot and determine the influence your plant(s) have had on other elements of the community. This should take about 15 minutes.

ACTIVITY D: Influence of Plants 15 min. groups	
Record the influence your plant(s) have in the following:	
Describe the following:	ACTIVITY E: Influence on Plants 15 min. groups
	As a group, record evidence of things both natural and the result of people which have influenced your plant community.
1. NEIGHBORING PL. (size, shape, number, variety)	Influence (list)
2. LOCAL CLIMATE (estimate humidity, temperature, and wind)	Natural
3. SOIL	
4. ANIMALS (wildlife or domestic)	Human
5. WATER RELATIONSHIPS (examine the bagged 1 to see amount of water that the plant has transpired)	
6. OVERALL CONTRIBUTION (to environment)	
(to people)	
	ACTIVITY F: Plant Community Tour 10 min. groups
	This is the first chance your group has to show your plot to the other teams. Present them a 5 minute tour which summarizes your findings. Use your Activity Sheets A, B, C, D & E to help you plan your tour. Your group should decide what you want to present on your tour and how you will present it. Consider these elements:
	1. Major contributions of your plant community:
	2. Major influences on your plant community:
	3. Special or unique properties of your community:
	4. If you owned this property, what management guidelines would you make about the use/protection of your plant community. Why?

4. Then, using Activity Sheet E, record the human-caused and natural events that have modified or influenced your plant community. This should also take 15 minutes.
5. Then, as a team, use Activity Sheet F to plan a tour of your site, which you will present to the other teams. More than two people must be involved in the tour and you need to be ready by __. Notice that the teams must speak to management guidelines and rules for use and protection.
6. Allow a total of 40 minutes for activities D, E and F. Give students times along the way, and encourage them to go right onto activities. Constantly monitor and adjust while they are working.

C. Retrieve Data

Spend 10 minutes at each plot, 5 minutes for the presentation and 5 minutes for questions. The team should use their notes to present their tour/findings. As you leave each plot, remind the group to remove and save all flagging.

Once each group has presented their tour/findings, conduct a discussion, asking:

- a. How do these influences affect or contribute to people and their needs?
- b. What general statement can we make about the value of plants?
- c. Now that we have seen how plants affect their environment, including people, what evidence of human influence did you find on your study plot?
- d. What are some of the guidelines for the use and protection of plant communities that your group developed?
- e. What were some of the influences your plants had on their environment?
- f. How do these influences affect the survival of the plant community?

Concentrate on those questions not answered well or completely on plot tours.

CLOSURE

From our investigation, what can we say about the relationships between plants and humans?

TRANSITION

Another method of communicating the functions of plants in a community or ecosystem is by role playing.



DRAMATIZE PLANT ROLES

CONCEPT	System, Perception, Interaction
PRINCIPLE	Similarities can be drawn between plant and human communities.
OBJECTIVE	<ul style="list-style-type: none">• The student will be able to compare a plant community to a human community.
PREPARATION	A comfortable location for the presentations.
MATERIALS NEEDED	<ul style="list-style-type: none">• Pens or pencils
PROCESSES USED	<ul style="list-style-type: none">• Interpret data• Communicate• Observe
TIME	20 to 30 minutes

DOING THE ACTIVITY (outdoors)

A. Set Stage

We have discussed some of the roles plants play in their community. One means of summarizing for an individual who has not seen your study plot what we have learned about plant communities, is to develop analogies to human communities.

B. Procedure

1. Give the instructions:

In your group develop a brief presentation (skit, drama, poem, pictures) which depicts how you (representing your primary study plant) relate to the others in your group.

2. Review the instructions for preparing their small group presentations.
3. Give groups 15 minutes to prepare.

C. Retrieve Data

1. Groups make their presentations.
2. Conduct a discussion, after all presentations, of what has happened.

Questions to consider are:

- a. What are some things we found out about plant communities?
- b. What are some influences that plants have on the environment?
- c. How can we summarize the role of plants in this world?

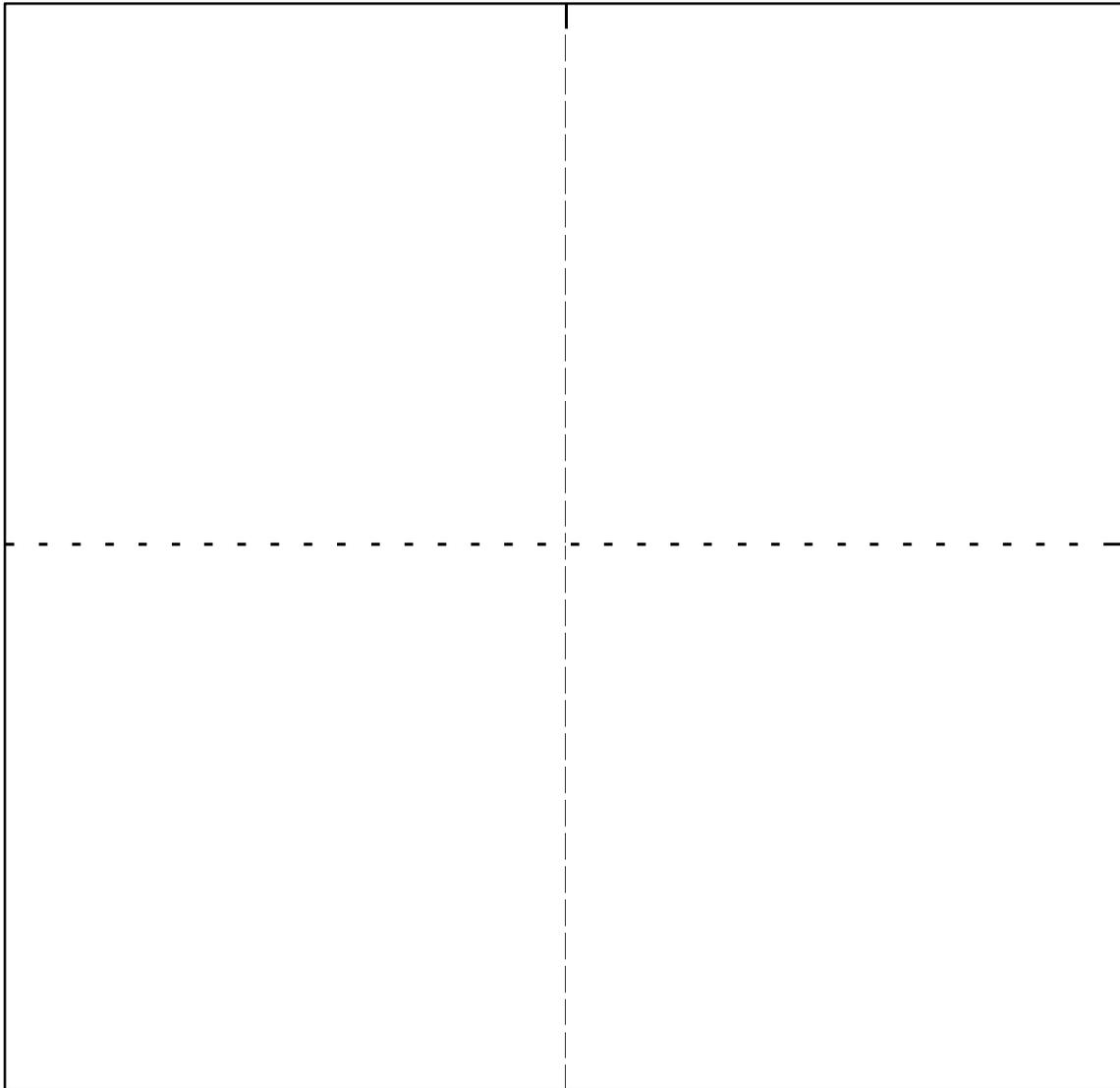
CLOSURE What are some similarities between plant and human communities?



ACTIVITY A: Map your plant community

30 min.
groups

1. Select a representative area, mark the boundaries (corners and mid-points) of your plot with flagging. The plot should be twelve steps square.
2. As a group, decide upon the most significant or most characteristic plants of your plot.
3. Each person should choose one of these as a primary study plant to map, describe, and mount, and a secondary study plant if so instructed by your teacher.
4. Place a plastic bag over your primary study plant. You will use these plants later.
5. Working individually, map the location of all occurrences of your study plant. Develop your own plant symbols.



← - - - - - 12 steps - - - - - →

Primary Study Plant (Name) _____ (Symbol) _____
Primary Study Plant (Name) _____ (Symbol) _____

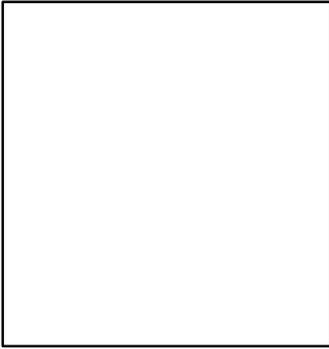


ACTIVITY B: Look at Plant Distribution

individual

As presentations are made, please characterize each plot by sketching general plant patterns that you see.

1st Plot



Thoughts : _____

2nd Plot



Thoughts : _____

3rd Plot



Thoughts : _____



ACTIVITY C: Study of a Single Plant

30 min.
individual

1. Working individually, describe the following information about your primary and secondary study plants.

Describe the following:	Primary Plant	Secondary Plant
<ul style="list-style-type: none"> a. TYPICAL LOCATION (sun/shade) b. BRANCH PATTERN (describe or sketch) c. KIND OF LEAF (sketch) d. ROOT SYSTEM (sketch) e. REPRODUCTIVE BODIES (describe or sketch) f. APPROXIMATE AGE g. MAJOR FEATURES h. RELATIVE SIZE i. NAME: DESCRIBING MAJOR FEATURES j. COMMON AND SCIENTIFIC NAME (look up later) 		

2. Prepare a specimen of your primary study plant.

3. If time and materials are available, prepare a specimen of your secondary plant; record information for later use.



ACTIVITY D: Influence of Plants

15 min.
groups

Record the influence your plant(s) have in the following:		
Describe the following:	Primary Study Plant Name _____	Secondary Study Plant Name _____
1. NEIGHBORING PLANTS (size, shape, number, variety)		
2. LOCAL CLIMATE (estimate humidity, temperature, and wind)		
3. SOIL		
4. ANIMALS (wildlife or domestic)		
5. WATER RELATIONSHIPS (examine the bagged plant to see amount of water that the plant has transpired)		
6. OVERALL CONTRIBUTION (to environment)		
(to people)		

ACTIVITY E: Influence on Plants

15 min.
groups

As a group, record evidence of natural and human-caused events that have influenced your plant community.

Influence (list)	Evidence	Result
Natural		
Human		



ACTIVITY F: Plant Community Tour

10 min.
groups

This is the first chance your group has to show your plot to the other teams. Present them a 5-minute tour which summarizes your findings. Use your Activity Sheets A, B, C, D & E to help you plan your tour. Your group should decide what you want to present on your tour and how you will present it. Consider these elements:

1. Major contributions of your plant community:

2. Major influences on your plant community:

3. Special or unique properties of your community:

4. If you owned this property, what management guidelines would you make about the use/protection of your plant community?

Why?