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Give Forests a Hand
Youth Action Guide

A youth program for environmental action and community service

School of Forest Resources and Conservation
Institute of Food and Agricultural Sciences
University of Florida

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Give Forests a Hand

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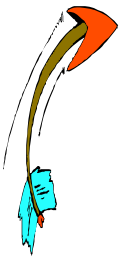
Welcome!

What is *Give Forests a Hand?* It is your guide to action. *Give Forests a Hand* will help you explore key issues and establish an action project to help forests in your community.

Go ahead - try it. Use this book with a group of friends or by yourself to investigate forests where you live.



Let's get started:

Get organized!

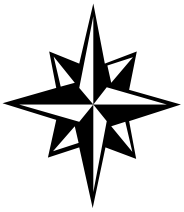
You are embarking on an adventure that may last a month, a year, or a life time. This is a journey that helps you to become part of a better future. And this journey has a lot to do with a major feature of our earth – forests. This *Youth Action Guide* will help your group choose and organize a service project to benefit the trees and forests in your community. Here are some tips to get you started:

Keep a project notebook

Use the pages in your *Youth Action Guide* to keep track of your work. You'll need to record your observations, take notes, and remember names and phone numbers.

Plan your time

A timeline will help you determine how much time you'll need for each step. If your time is limited, fill in the last possible meeting date and then plan backwards. In order to complete all the steps, you'll need a series of meetings, each an hour or two long.



Collect maps

In order to describe features within your forest, you will need to study maps. Your leader can help you find different maps of your area. Maps you may want to collect include topographic, road, soil, vegetation, and plat maps. You may also find maps and aerial photos on the Internet.

Get help from an expert

Experts from many groups are ready to help you do your best. Ask your leader or teacher to help you find the right organization or person for your project.

Know the lingo

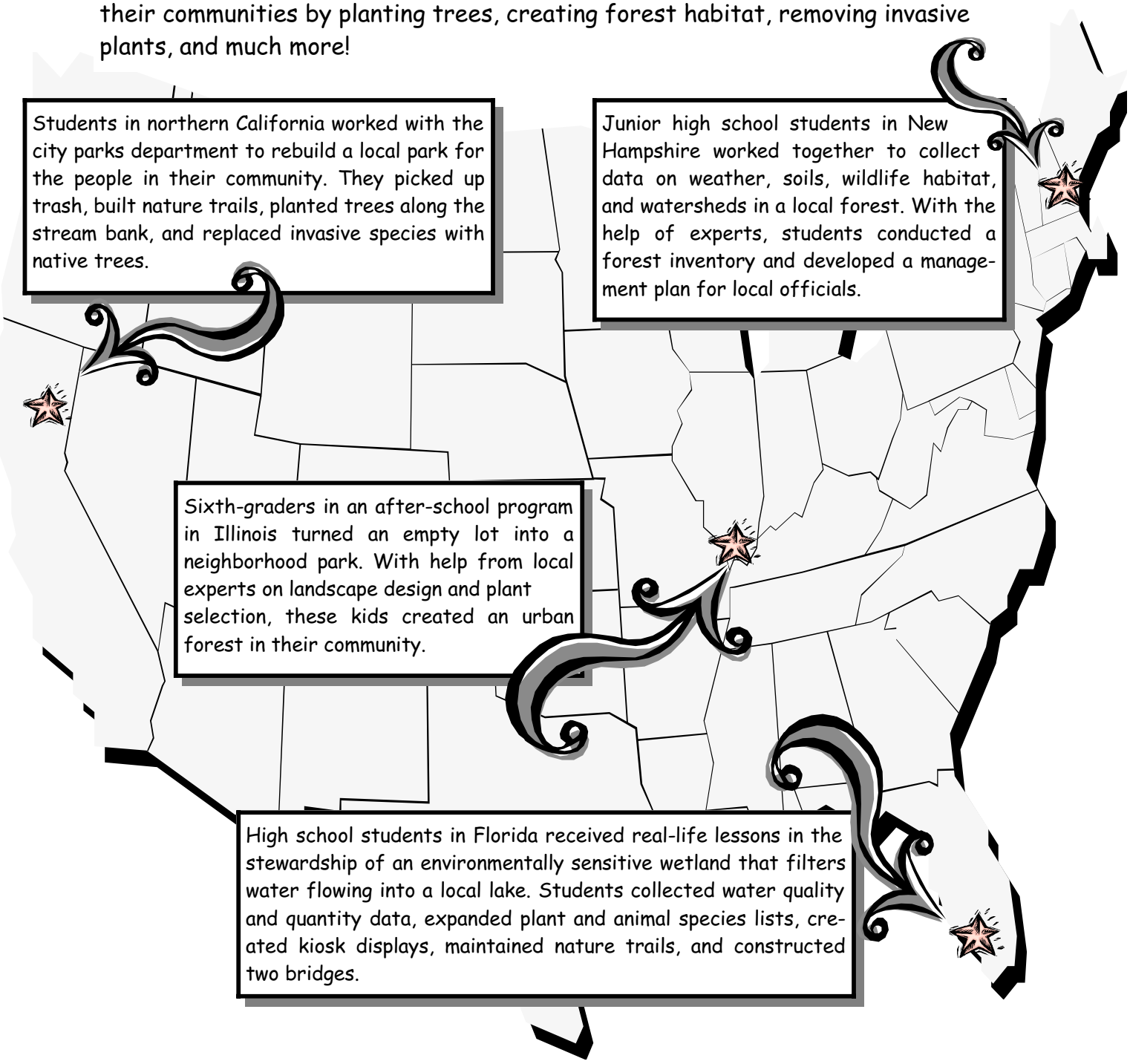
As you read through your *Youth Action Guide*, you'll see words underlined in the text. You can find a definition of these words in the glossary on pages 67 –68.

Your Timeline

Step	Estimated starting date
1	
2	
3	
4	
5	
6	
7	
8	

Make a difference!

Thousands of young people from coast to coast are already making a difference in their communities by planting trees, creating forest habitat, removing invasive plants, and much more!



Students in northern California worked with the city parks department to rebuild a local park for the people in their community. They picked up trash, built nature trails, planted trees along the stream bank, and replaced invasive species with native trees.

Junior high school students in New Hampshire worked together to collect data on weather, soils, wildlife habitat, and watersheds in a local forest. With the help of experts, students conducted a forest inventory and developed a management plan for local officials.

Sixth-graders in an after-school program in Illinois turned an empty lot into a neighborhood park. With help from local experts on landscape design and plant selection, these kids created an urban forest in their community.

High school students in Florida received real-life lessons in the stewardship of an environmentally sensitive wetland that filters water flowing into a local lake. Students collected water quality and quantity data, expanded plant and animal species lists, created kiosk displays, maintained nature trails, and constructed two bridges.

YOU and your group can also make a difference!
Use *Give Forests a Hand* to organize your own project….

Why are trees important?

Did you know that the United States is covered with forests? There are 735 million acres of forested land in the  United States, about 1/3 of the area of the country. About 2/3 of the nation's forests are classified as commercial forests. America's commercial forests are owned by individuals (59%), public agencies (27%), and forest product companies (14%). The remaining one-third of the nation's forests (245 million acres) have been set aside for parks, wildlife conservation, and  recreational uses.

Forests affect nearly every aspect of our lives. Forest products provide the raw materials for our  homes, our workplaces, the  books and newspapers we read, and the packaging for our food. The average American uses about 750 pounds of wood and paper products each year. That means the average person uses the equivalent of a 100-foot high, 16-inch diameter tree every year.

Forest ecosystems supply our water, maintain our climate, improve the quality of our water and air, and prevent soil erosion. Trees provide  habitat for wildlife and serve as sources of  food, fuel, and medicine for people throughout the world. Forests provide wilderness experiences like hiking, camping, skiing, hunting, fishing, bird watching, and photography.

Trees create a feeling of relaxation, privacy, and a sense of well-being. Trees impact our moods and emotions; a healthy forest growing in a place where people live and work is an important factor in their health. Studies have shown that a view of  trees outside hospital windows shortens  post-operative stays. Trees also contribute to a sense of community pride and ownership. They add character to our towns and cities, provide color, and soften the hard appearance of our cities.

Unfortunately, people have not always used their tree and forest resources wisely. We have cut  down trees in our urban centers and overlooked the urban forest as a valuable part of the cities' infrastructure. We have altered forest ecosystems by introducing invasive species and created problems of soil erosion by cutting trees along stream banks. It would seem that our biggest problem is the lack of knowledge about the benefits of trees and forests and how they impact our lives.

One of the ways you can protect trees and forests is by improving the ways people impact forests. What you do in your yard, street, park, or school yard with *Give Forests a Hand* can make a difference in your  community. The present and future benefits from forests of the world depend on the actions we take today. By picking up this book, you've already started to make a difference! Keep reading to find out what you can do.

Step 1: Focus on forests

To keep our trees and forests healthy, we need to understand the importance of trees in our home landscapes, school yards, community centers, city streets, and parks. In Step 1, you'll focus on what trees do for you and how people impact forests.

Getting started

A. Go outside and survey your surroundings. Pick an area that you walk by or use every day - like your neighborhood, school yard, local park, or city block. Look at several different maps of the area. Take a walk around and write down what you know about this area. Use the space below to describe the area you selected.

The area we selected is located at…

The area is used for…

Our area is considered: (check all that apply)

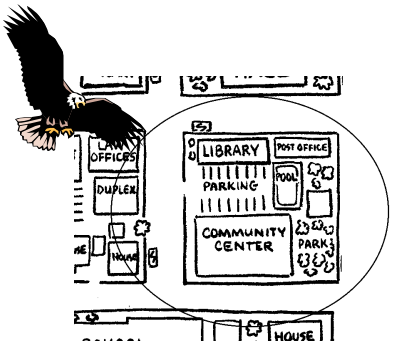
☐ suburban ☐ urban

☐ rural ☐ commercial

Do you know the history of the area? What was this area like before the buildings were here? When was that?

Sketch a birds-eye view of your area; list all the natural features (streams, animal trails, and hills) and human-made structures (roads, fences, and buildings) that border or cut through your area.

How do these features and structures impact the trees or forest in your area?



Sketch your area here.

B. Within your original area, select a small square or rectangular plot. Your plot should be approximately 500 to 1,000 square feet and should contain at least 10 trees. If you selected your neighborhood, your plot may be your backyard and neighbors yard. If you selected a city block, your plot may be all the street trees on that block.

Put flags or markers at the corners of your plot so you can see what's inside and outside your plot.

Calculate the area of your plot. If you are estimating the area of a rectangle, multiply the length of one side times the width of one side (L x W). If you are estimating the area of a square, you can multiply the length of one side times itself, or S^2.

Our plot is _____ square feet.

Walk through your plot and describe what's there. Be sure to include the following items in your description:

There are _____ (number) trees in our plot.

There are _____ (number) different kinds of trees in our plot.

Describe your plot here:

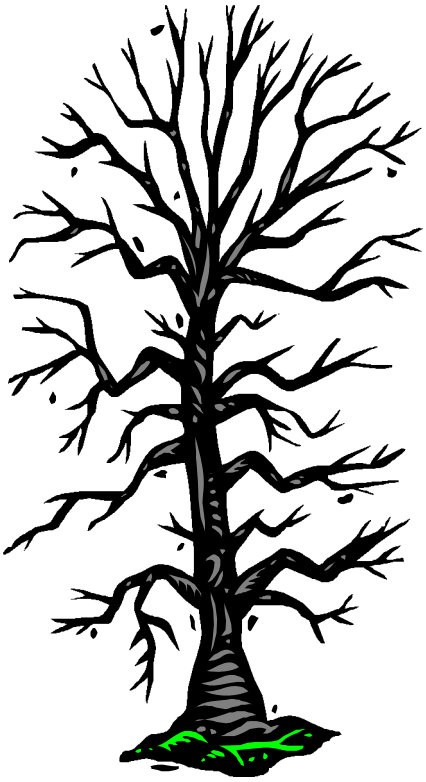
Work together to identify the trees in your plot. If you get stumped, use a tree field guide or ask your leader to help you identify them. What will you do if the tree is very tall and you can not reach a leaf to help you identify the tree? *Hint: Use binoculars, look at the bark, and investigate the ground under the tree for a fallen leaf.*

The different kinds of trees in our plot are:

Measure the circumference of all the trees in your plot. The circumference is the distance around the trees trunk. Measure the circumference of each tree at the same distance above the ground.

Record your measurements here:

Do the trees in your plot look healthy? What type of things might you look for to determine whether your trees are healthy or not?



Arborists use a rating system to judge the health or condition of the trees in an area. Use the following rating system to estimate the condition of the trees in your plot.

0=dead	Dead trees or snags.
1=poor	The tree is lacking a full crown - only 0 to 15% of the branches and foliage at the top of the tree remain. Large cavities are present in the trunk. Fungi, dead wood, disease, or insect problems are visible. There is not enough growing space for roots and crown. Tree limbs are dead or rotting and could be a possible safety hazard.
2=good	Intermediate to full crown - 60 to 90% of the branches and foliage at the top of the tree remain. Trunk is free of cavities, rot, disease, and insect infestations. There is enough growing space for roots.
3=excellent	High quality tree with a well balanced crown - 90 to 100% remaining. Free of cavities, rot, disease, and insect infestations. There is plenty of growing space for roots.

What are some other things in your plot that might affect the appearance or condition of the trees? Look for the items below:

In our plot, we found:		
☐☐bare soil	☐☐burned areas	☐☐cars parked on top of roots
☐☐thick vegetation	☐☐signs of wildlife	☐☐dead or diseased tree limbs
☐☐trash/litter	☐☐compacted soil	☐☐trees too close to buildings
☐☐signs of prior use	☐☐trails	☐☐exposed roots
☐☐other _____	☐☐other _____	☐☐other _____

C. Draw a birds-eye view of your plot. Note where individual trees are as well as other natural and human structures. Put an asterisk (*) by anything you think might be important to explore later.

Sketch your plot here.

In the space below, write down things you like and dislike about your plot and things that you want to ask questions about later. If you aren't sure what things are helpful or pose a problem, just record what you see. For example: Are the tree trunks damaged? Do the trees appear healthy? Is there a dead tree limb hanging over a sidewalk?

These are the things I like about our plot:

These are the things I dislike about our plot:

These are the things I want to ask questions about later:

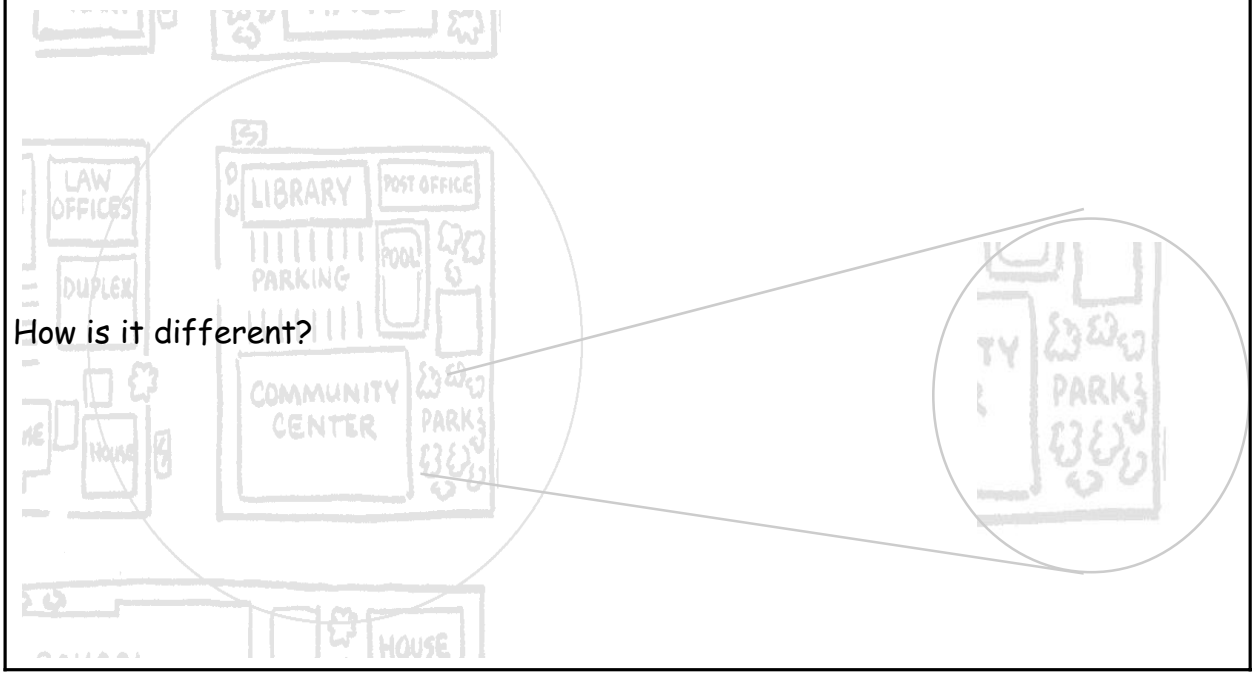
Things our group might want to explore later.

* .....
* .....
* .....
* .....

Now, compare the drawing of your plot with that of the larger area.

Is your plot similar to the area you began with? In what way?

How is it different?



Before next time.....

☐ To get ready for your next meeting, think about areas you might want to investigate. Read Step 2 and look over the four checklists on pages 69 - 103. There's a checklist for each of these sites:

Home - your backyard, neighborhood, or apartment complex.
School - the area around your school.
Community - a vacant lot, public park, wild space, or city street.
Forest - private, commercial, state, or federal forest.

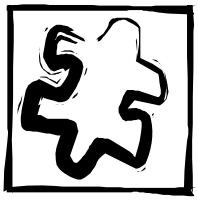
Think of at least one place where you could use each checklist.
List them here:

Home -

Community -

School -

Forest -



Make the connection

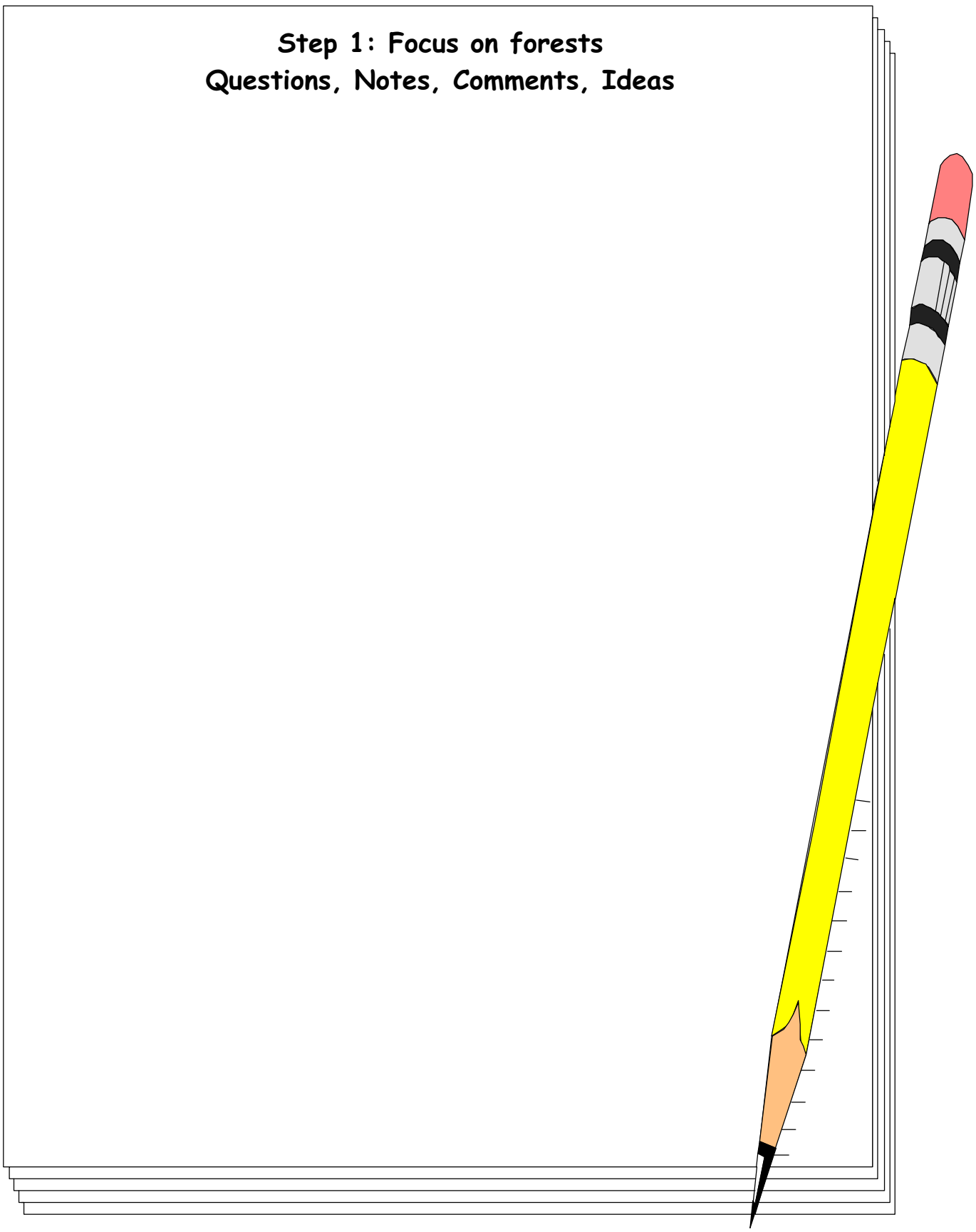
At the end of each step, you'll find questions to help you reflect and expand on the activities you just completed. Answer the questions by yourself, then at the next meeting share your answers with the group.

1. List three ways people affect trees...in good and bad ways.

2. What are some ways that trees affect people?

3. List five items that you used today that came from a tree.

Step 1: Focus on forests
Questions, Notes, Comments, Ideas



Step 2: Discover a need for action

In the last activity, you explored a local forest and described some of its key features. You began to think about ways in which forests affect you and how people affect forests. Now it=s time to dig deeper - your group will use a checklist to identify forest-related topics or issues in your area and determine which need additional investigation. You will find out what is already being done and what still needs to be done to protect trees and forests in the area. Step 2 will help you focus on a real need. You will use this information in Steps 4 and 5 to research and select an action project.

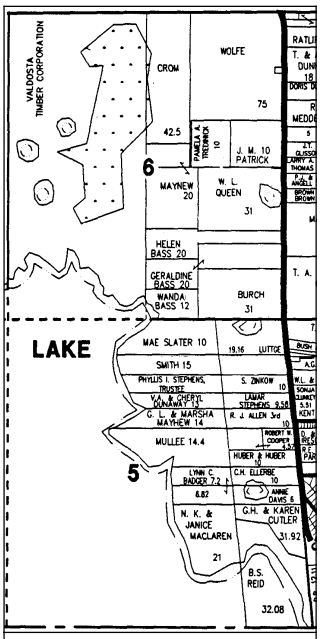
Getting started

A. To do this activity, your group needs to choose a site - home, school, community, or forest. At the end of Step 1, you were asked to read through the checklists on pages 69-103 and select an area where you might conduct each checklist. Now it is time to share your ideas with the group. At the top of four large sheets of newsprint, write ›Home,= ›School,= ›Community,= and ›Forest.= Then have each group member list and describe the locations he or she considered. Did any of the group members list the same sites?

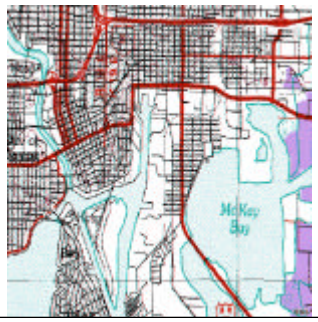
Keep a record of all the places your group members mentioned. You may want to visit some of these places later.

Home	School	Community	Forest

B. Which area will your group investigate? Pick one that the group agrees will be interesting and fun to explore. Remember, you can continue to work in the area you chose in Step 1. If you select another area, go there with your group and explore the trees and forests in the new area. Draw a site map of the area similar to the one you drew in Step 1. Be sure to record your observations on page 19.



Plat map.



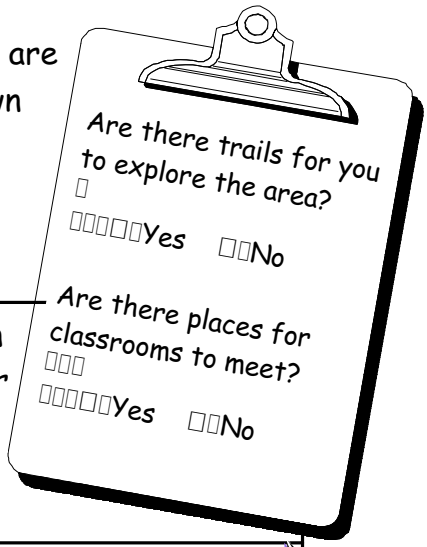
Road map.

After you select a site, you may want to look at several maps of the area. Maps describe natural and human-made features. They will also help you see whether the site you selected is similar to other areas in your state, city, township, or neighborhood. Study topographic, road, soil, and plat maps of your area before starting your checklist. Topographic or "topo" maps show the shape and elevation of the land. You may find topo maps at your local bookstore, library, or sporting goods store. Soil survey maps describe different types of soils and the types of vegetation associated with those soils. You can find soil maps at your County Extension Office. Your Soil and Water Conservation District Office can tell you where to find a plat map. Plat maps show the names of property owners in your county. You can also use aerial photos for a detailed picture of your area. Your County Tax Assessor may have aerial photos you can purchase. You may also find maps on the Internet. Search http://*terraserver.homeadvisor.msn.com* for maps of your town or city.

In the space below, list the types of maps you were able to find of your area.

C. Review the checklist for the site you choose in Part B and decide who will find the answers to which questions. You may want to work as a group or break into teams to find the answers. Some of the items on the checklists will be simple to answer, while others will need to be researched. Look in the phone book, search the Internet, visit the County Extension Office, ask the landowner, meet with the city parks department, or call a forester for help answering the questions. Your leader will help you find the right people to ask. Look on page 63 in the Skills Bank for *Tips on Taking Notes*.

D. Here is a sample question from the school checklist. There are also spaces at the end of each checklist for you to add your own questions. See the example below for instructions on how to complete the checklist.



1. Is there access to a forest area near your school?

Looking Good! *Check here if this is not a concern in your area or if action has already been taken.*	**We need more information** *Check here if you can't answer the question or if you need more information.*
What we found out—*Write a brief description of what you found about this particular topic. If there seems to be a problem, write down what is or is not happening.*	
We need more information about—*Determine what other information would help you answer the question and where you might find it.*	
Priority - Very Important Kind of Important Not Very Important *If you've found a potential concern, decide how important the problem is and assign a priority level to it* (Very Important, Kind of Important, Not Very Important). *Be able to explain your ranking to fellow group members.*	

Don't forget to answer the clipboard questions.

E. When you finish with your checklist, meet with the group to share your findings. Discuss any issues or concerns you have about this forest with the group and your leader.

Write your concerns here.

Make the connection

When you complete the checklist, answer the questions below. Try to answer them by yourself. Then share your answers with the group at the next meeting.

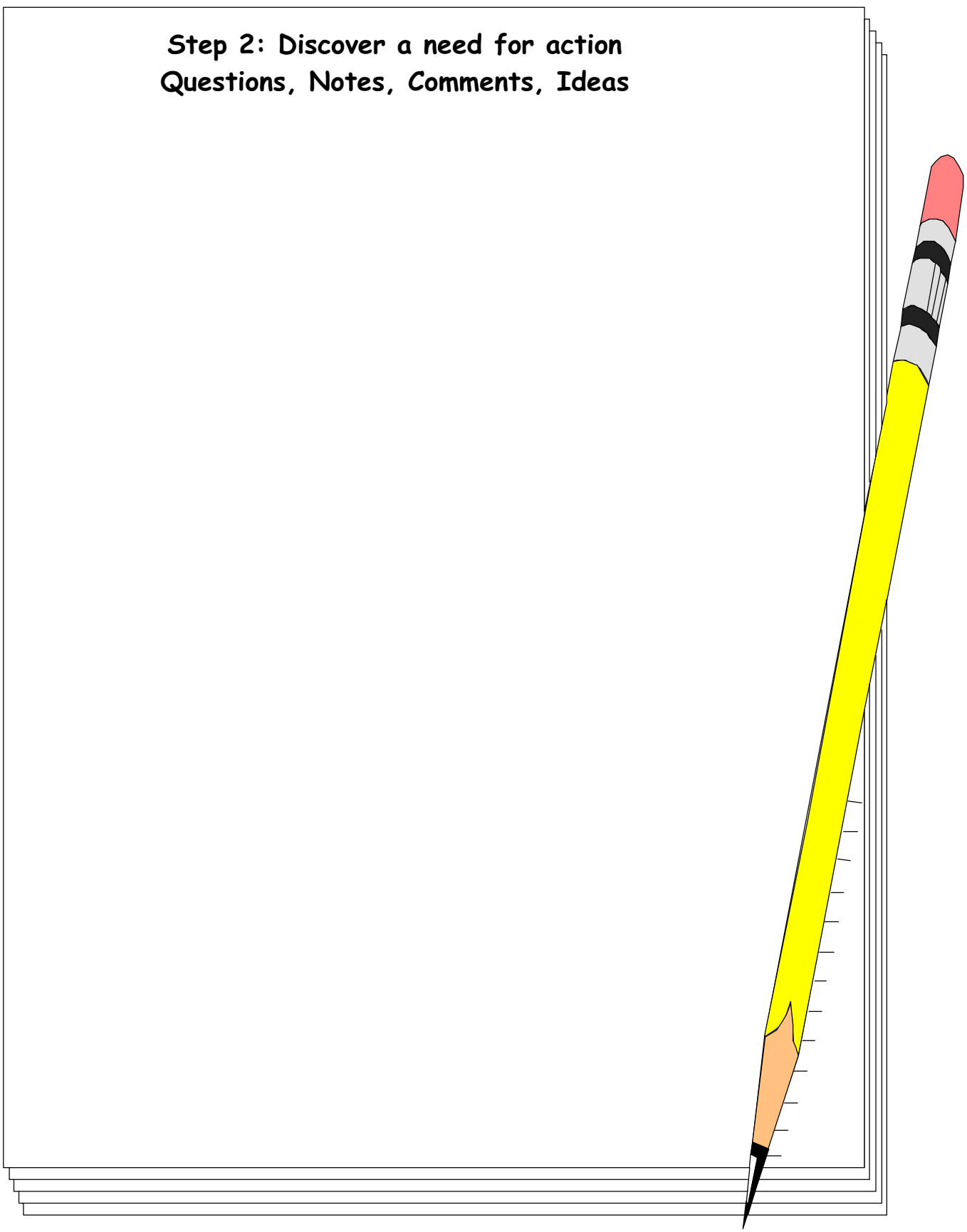
1. What are the priority needs for trees and forests at your site?

2. Why is it important to explore a problem before taking action?

Before next time…

☐☐Think about the forests you could visit and explore.

Step 2: Discover a need for action
Questions, Notes, Comments, Ideas



Step 3: Forests are more than trees

In Step 1 you collected information on characteristics that make up a forest, such as the types and sizes of trees. In Step 2 you used a checklist to discover a variety of forest and tree-related issues affecting forests in your community. In this Step, you'll learn more about the characteristics of different types of forests and the techniques used to manage them.

Forest management

It is not easy to label forests and place them into categories. Depending on where you live, forests may be called woods, woodlots, forests, or plantations. Forests can be differentiated by their location (e.g. urban or rural) and by their management objectives. Management objectives determine the methods used to manage the forest. A land owner who wants to grow trees for pulpwood may clear the land and plant fast-growing pine seedlings. Other land owners may decided to manage their forest for wildlife by setting aside natural areas, putting up nest boxes for birds, or planting food plots. Wilderness areas may be managed by leaving them alone while other forest areas may be managed by removing invasive exotic plants and conducting prescribed burns. Forests can also be managed for several objectives at the same time; this is called multiple-use management. Trees may be harvested for timber in an area while maintaining wildlife habitat and protecting stream quality. Scenic views may be protected in areas that are managed for recreation.

Even our urban forests are managed to provide multiple benefits. A healthy urban forest includes a mix of tree species that provide communities with many valuable services. These services can be thought of as part of the cities' infrastructure and can be measured in dollars. For example, trees can save cities millions of dollars by reducing stormwater runoff, increasing property values, and preventing soil erosion. They also improve air and water quality, conserve energy, and create wildlife habitat. Establishing and maintaining the urban forest is costly. Unlike commercial harvest operations where seedlings are used to reforest an area, urban foresters almost exclusively plant saplings and full-grown trees. Long term planning, appropriate tree species choice, utility line clearance, storm damage repair, debris removal, and maintenance are just some of the management considerations for urban foresters.

Now it's time to find out how different types of forests are managed in your area.

Getting started

A. In the table below, list all the forests that you can think of in your state. Look at maps, search the Internet, and look through the phone book. Be sure to list local parks, state forests, and national parks; all of these places manage the forests within their borders. Next, place a check in the column to the right of the forest indicating if it is in an urban or rural location.

Forest	Urban	Rural

B. In the table on page 24, write the name of a forest from the list you made in Part A. The forest should be close enough for your group to visit and have a staff member or volunteer that can talk to you about forest management practices. Try calling the forest manager, city arborist, or the agency responsible for that forest. Visit the forest and ask the manager for help filling in the table.

As you continue through your *Youth Action Guide* remember that there are a variety of forest types; you can find wild areas and intensively managed areas in many places. What is good for one forest may not be appropriate for another. Understand the management objectives for each forest your explore.

Now, in the table on page 25, answer the same questions for the forest you selected in Step 2. You may already have the answers in checklists.

Make the connection

When you finish filling in the 'Forest Management Practices' tables, answer the questions below. Try to answer them on your own, then share your answers at the next meeting.

1. Why is it important to have a forest management plan?

2. If you inherited 1,000 acres of forest land, what would be some of your management goals?

3. Compare the forest types and their management practices for the 'Forest Management Practices' tables on pages 24 and 25. How are they similar? How are they different?

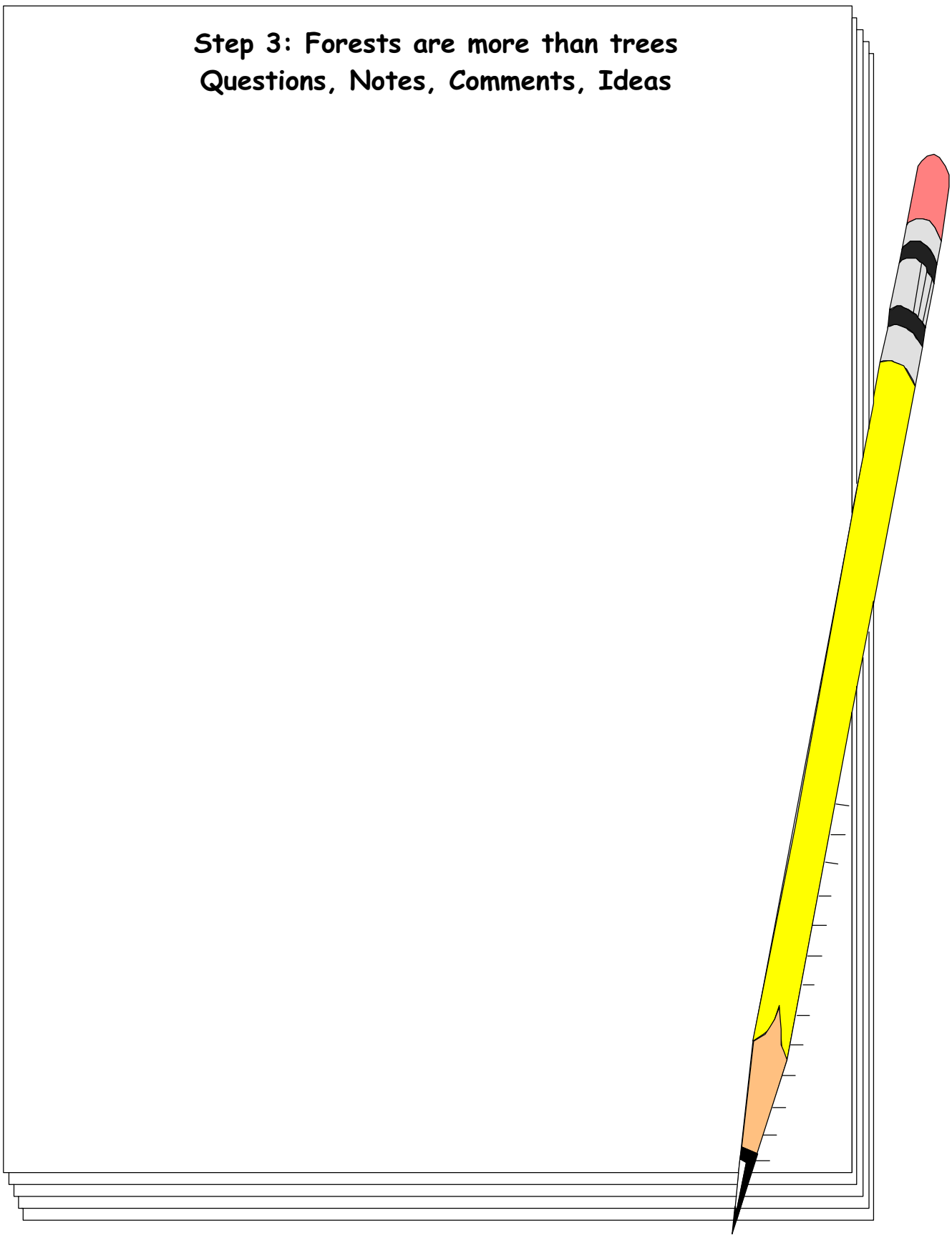
Forest Management Practices

Forest Name:	
Does the forest have a management plan?	
What services or products come from the forest? Do these services or products provide income for the landowner?	
How are the trees harvested?	
How do forest managers protect water quality in the forest?	
How are trees planted? How old are the trees that are planted?	
How are newly planted trees watered?	
Are areas of the forest managed to provide food, water, and cover for wildlife? How? What types of wildlife are seen in the forest?	
How often are herbicides used in the forest?	
How often is the forest fertilized?	
Is prescribed burning used as a management tool?	
How often are the trees pruned?	
How many people visit this forest each year? What types of recreational activities do they engage in?	
How are dead trees handled in the forest?	
How are insect and disease outbreaks handled in the forest?	

Forest Management Practices

Your Forest (from Step 2)	
Does the forest have a management plan?	
What services or products come from the forest? Do these services or products provide income for the landowner?	
How are the trees harvested?	
How do forest managers protect water quality in the forest?	
How are trees planted? How old are the trees that are planted?	
How are newly planted trees watered?	
Are areas of the forest managed to provide food, water, and cover for wildlife? How? What types of wildlife are seen in the forest?	
How often are herbicides used in the forest?	
How often is the forest fertilized?	
Is prescribed burning used as a management tool?	
How often are the trees pruned?	
How many people visit this forest each year? What types of recreational activities do they engage in?	
How are dead trees handled in the forest?	
How are insect and disease outbreaks handled in the forest?	

Step 3: Forests are more than trees
Questions, Notes, Comments, Ideas



Step 4: Explore your priorities

After your group has completed its checklist and thought about different ways to manage forests, you are ready to explore forest-related issues and brainstorm possible project ideas. Use your checklist responses to guide you as you gather more information on forest-related topics. Start by thinking about and discussing the boxes you checked ☑ Very Important and ☑ Kind of Important.

Search for information

A. If you want to find out more information about forest issues that affect your community, research them! Places to search for information include the telephone book, library, and the Internet. Look up environmental organizations in your community. Call and ask if they work on forest-related issues. If so, ask them to send you information about their programs. You may find a city arborist, county forester, or park naturalist helpful as you research your topic.

You can also learn a lot of information and get project ideas by simply reading the newspaper. The editorial section of your local newspaper is just one place to gather a variety of opinions about problems facing your community. You can talk with experts who work on forest-related issues to gain a professional perspective on how they deal with these problems.

Another way to ensure that you get a lot of information and variety of opinions is to divide into small groups and assign each group the task of gathering information on some aspect of an issue or topic. Each group will search for information that supports a position. If your topic is controversial, it is particularly important to understand all sides of the issue.

In order to keep everyone on track, make sure group members know who is responsible for collecting what information. List the person or person responsible for getting the information, the information they are looking for, where they might find it, and who they should ask.

Person(s) responsible	Information	Where	Who

Keep in mind that your original sources may lead you to other sources of information. It is important that you follow these leads; the person or source that someone suggests may be the person that can really help your group accomplish its goals. Depending on the topic that you are investigating, this step could take several meetings. Add to the table above each time you come back together as a group and assign new responsibilities or research objectives as needed.

B. Once the information has been collected, bring all the information together and think about possible project ideas. At the top of a large piece of newsprint, write 'Source of Information' and list all the different sources you used to gather information about your topic. Under each source, summarize the 'Main Points' with a list of the important aspects. After you fill out the newsprint sheets, each person or group should give a brief discussion about their findings. Keep the newsprint sheets so that as new information comes you can add to it. Study the following example to help get you started.

For example: After conducting the School Checklist, the 4-H Environment Club at Andrews Middle School decided to gather more information on the school forest. Most of the students didn't realize that the forest just beyond the parking lot was school property. Students began researching the checklist questions they checked 'Very Important' and 'Kind of Important.' One group of students talked with the groundskeeper and found that there was no management plan for this area. Another group interviewed the principal and learned that she considered the area a buffer between the housing development and the school. She also felt that it was seriously neglected and could be a possible danger to students. The principal suggested the students talk with the neighbors closest to the forest to understand their opinions. Another student called the county forester to find out what needed to be done in order to develop a management plan. After collecting information from several sources, the students started piecing the picture together.

Sources of Information

Interview: Principal Main Points	*Interview: Neighbor* Main Points	*Phone: Forester* Main Points
There is no plan for the forest. I think it's part of a water retention system. It also acts as a buffer between the school and the neighborhood. The science teacher really wants to create an outdoor classroom. But as I told her, we don't have the money or the people power to get the job done. I've thought about clearing that area - it's becoming a danger to the students. It's full of trash and overgrown vegetation. It's unsafe for the students who cut through there on their way to school.	I thought that forest belonged to the housing development. I like having a tree buffer there. It keeps some of the noise down from the school. I enjoy walking my dog back there. I sure hope it stays that way. I'd like to stay informed about what's going on. Are you going to be cutting the trees down or attracting unwanted wildlife?	You need a management plan for the forest. Start by thinking about the objectives for this forests. How do you plan to use the forest? How will others use it? An outdoor classroom can help teach about forestry practices or wildlife. It can also provide for water retention, shade, or perhaps all those things. You need to find out more about the forest, like regulations about what you can or can't do. Ask the principal to find out about that.

Think about the sources of information the students at Andrews Middle School collected and answer the following questions:

What is the forest-related topic or issue?

Are there common themes among the three information sources?

Who else could the students contact for information?

What problems might occur if the students go through with their project without talking with the neighbors?

Can you think of anyone else who might object to students developing a plan for the school forest?

List 5 project ideas that the students could do based on the information collected.

C. After all the groups have presented their information, discuss the common themes and connections between the different data sources. Try to answer the same questions the students at Andrews Middle School answered with the information your group collected. This will help you decide if you need to continue your information search.

What are the forest-related topics or issues we discovered?

Has our information collection effort turned up common themes among the data sources?

Who else should we contact for information?

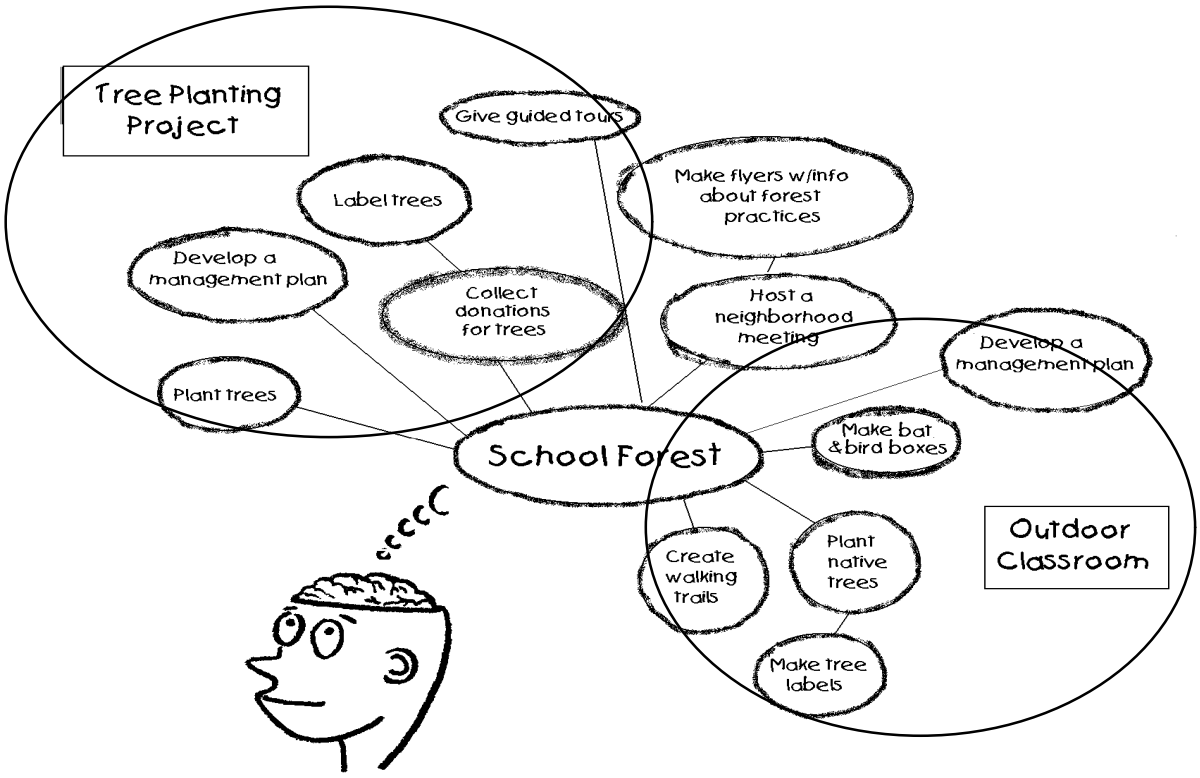
What are some possible problems with our data?

Can you think of anyone else who might have a different opinion?

D. Now, list as many project ideas as you can based on all the information you collected. Try to generate a long list of possible projects rather than limiting yourself to the first ideas mentioned. Use the project ideas on pages 35-38 for suggestions.

If you need help brainstorming project ideas, try creating a mind map. A 'Mind Map' is one way to generate and arrange ideas. On a large piece of newsprint, write your forest-related topic or issue in a circle in the middle of the page. As you discuss project ideas write them on the piece of newsprint. Some activities might relate to each other in one project. Keep going until you can't think of any more activities or ideas that could be done. Finally, try to organize the activities into a larger project.

Below is a Mind Map the students at Andrews Middle School used to help them think about project ideas and what needs to be done. They thought of some great ideas and organized them into two different projects. The students knew that in order to create an outdoor classroom or conduct a tree planting project, a lot of smaller tasks would need to be done. The mind map helped them arrange their ideas so they could see what needed to be accomplished first.



Make the connection

Answer the questions by yourself, then share them with the group when you finish this step. Use page 34 if you need more room to write.

1. Why is it important to gather information from a variety of sources?

2. Which data-gathering technique did you like the best? Which was most informative?

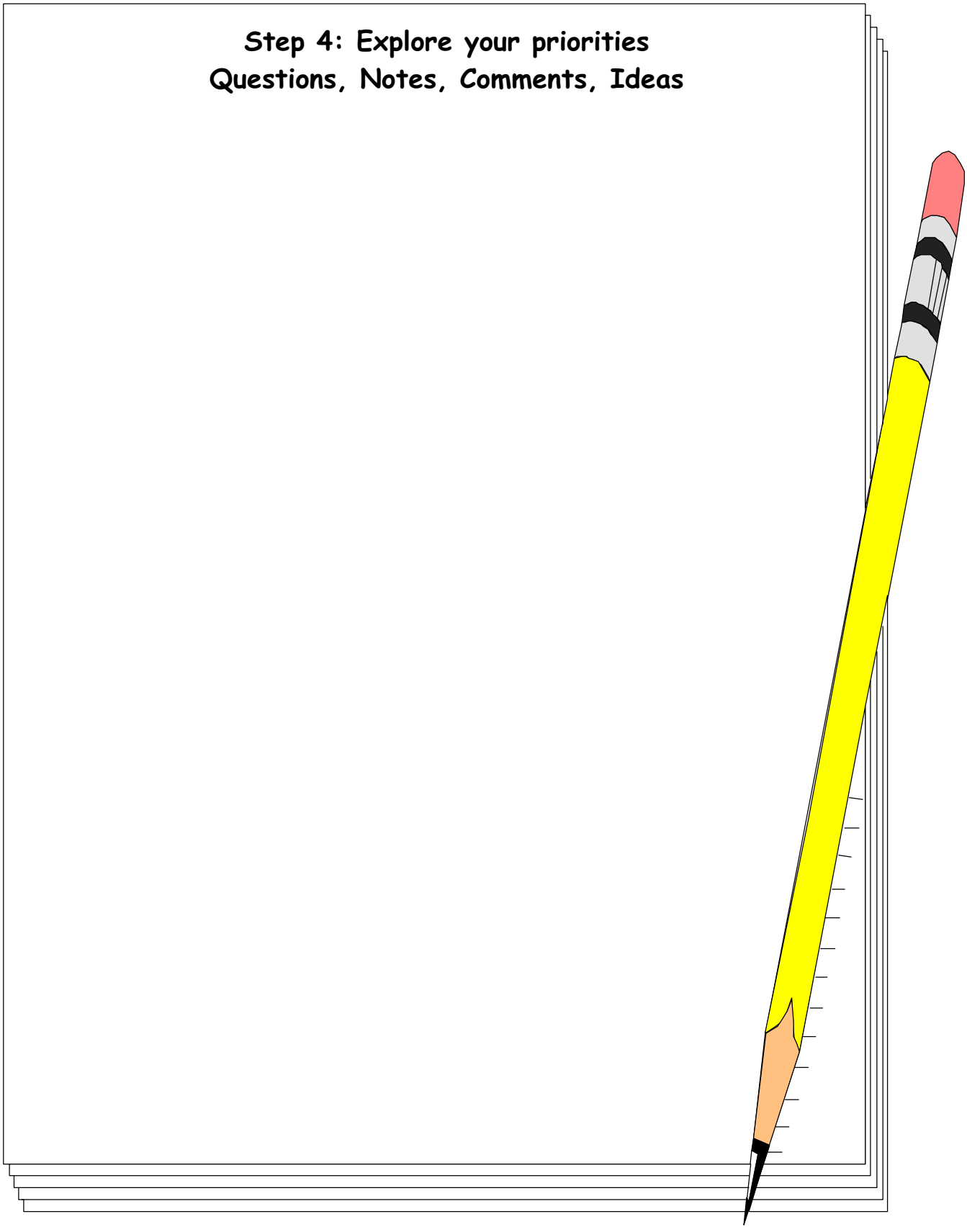
3. What type of information is best obtained in person? Over the phone? From the newspaper?

Before next time...

☐ In this step you identified and investigated a forest-related topic or issue. At the end of the exercise you and your group members generated a long list of possible projects and ideas. Look over all the project ideas and activities you listed and place a ☐ by three projects or activities you are excited about doing.

☐ Read through the project descriptions on pages 35-38 for more project ideas and activities.

Step 4: Explore your priorities
Questions, Notes, Comments, Ideas



Home Site Projects

There are many simple actions you can take at home to preserve and protect trees and forests. You can explore and discuss these actions as a group, then implement them individually in your own homes and neighborhoods; or take on a larger project together.

Plant drought-resistant native trees and shrubs in your yard. Contact your Water Management District, Native Plant Society, or County Extension Office for a list of native tree species that should do well in your area.

Develop a landscape management plan for your yard. First, find out if your family has a plan, then talk to them about different management objectives like energy savings, attracting wildlife, and reducing traffic noise. Discuss different ways you can work together to achieve these goals.

Begin a compost pile in your backyard to dispose of yard wastes. If you live in an apartment building, get permission from your landlord and invite other residents to join in. Contact your County Extension Office or Waste Management Agency for information on composting. To find out everything you ever wanted to know about composting, check out Cornell Composting at *www.cfe.cornell.edu/compost.*

Learn about proper lawn and tree maintenance practices with your family. Contact your County Extension Office, search the Internet, or look in your local library for information on the care and maintenance of plants.

Buy a rain gauge for your yard and monitor it weekly to see how much rain you've gotten and whether you need to irrigate. Aim downspouts onto lawns and gardens. Contact your County Extension Agent or Soil and Water Conservation District Office to find out how much water your yard needs.

Test your soil to determine how much fertilizer your trees need. Contact your County Extension or Soil and Water Conservation District Office for a soil test kit. If you live in an apartment building, give the test results to the lawn maintenance staff and explain them.

Start a recycling program in your own home or apartment complex. Calculate the amount of paper products your family throws away each day. Contact the Waste Management Agency in your area to find the location of the nearest recycling collection center and the materials that can be recycled. Share this information with your neighbors.

School Site Projects

Develop a management plan for your school forest or natural area. Find out if your school has a plan, then talk to the administration about different management objectives such as energy savings, beauty, outdoor classrooms, and harvesting. Discuss different ways your group can help achieve these goals.

Landscape the school yard with native trees, shrubs, flowers, and grasses. Plant around parking areas to reduce water runoff from paved surfaces. Contact your County Extension Office, Natural Resources Conservation Service, or National Arbor Day Foundation (*www.arborday.org*) for information on planting natives.

Adopt a nearby park or forest. If you have a forest or natural area on your school's property, create a nature area. Contact your local Natural Resources Conservation Service Office, County Forester, or City Arborist to help you get started.

Create information packets for families of new students to locate recycling facilities and properly dispose of hazardous wastes. Contact the local Waste Management Agency for more information.

Start and maintain a compost pile on the school grounds for yard waste. Use the compost to enrich the soil for gardens and landscaping in the spring. Contact your County Extension Office, Soil and Water Conservation District or check out Cornell Composting at *www.cfe.cornell.edu/compost.*

Research alternatives to current landscape management practices at your school. Look at how your school's grounds staff decides when to use pesticides and how they dispose of hazardous wastes. Give presentations to custodians, school board, administrators, and other school officials on the alternatives you propose.

Build an outdoor classroom to help everyone at your school learn about trees and forests. Include a nature trail that identifies trees around the school. Contact your County Extension Office, City Arborist, or Project Learning Tree Coordinator (*www.plt.org*) for information.

Celebrate the forest. Plan a forest celebration for one of the following events: Arbor Day, Earth Day, Forest Appreciation Week, or National Forest Products Week. Hold a poster contest and develop fact sheets on the importance of forests. Contact a park or forest manager to find how you can help celebrate the forest.

Community Site Projects

Conduct field surveys to document the location of invasive trees and other plants in natural areas in your community. Take photographs of invasive plants and create a bulletin board display of your findings at the local library.

Develop a tree protection ordinance. Ordinances enable citizens to safeguard street trees, prevent the spread of diseases, protect trees during development, and assure tree cover in commercial areas of the city. Search the USDA Forest Service Web site for examples of tree ordinances and guidelines at www.*fs.fed.us*.

Help your city or town become a Tree City USA. Contact the National Arbor Day Foundation (*www.arborday.org*) or your state forester to find out how.

Design and distribute flyers to people in your neighborhood about proper tree planting and maintenance practices. Contact your County Extension Office for more information.

Organize a community Arbor Day celebration. Obtain a free 'Celebrate Arbor Day!' packet by writing the National Arbor Day Foundation (*www.arborday.org*). The packet contains a sample proclamation, Arbor Day dates, an Arbor Day play, and great ideas for celebrating.

Develop a plan to purchase and plant native trees and shrubs along waterways to prevent erosion. Contact your local Soil and Water Conservation District Office, County Forester, or American Forests' Global ReLeaf project at *www.americanforests.org* to get started.

Create green spaces in city places by restoring vacant lots and retention ponds; create parks, wildlife habitat, recreation areas, and outdoor classrooms. Partner with your City Beautification Board, an urban forester, or the County Extension Office. Contact organizations like American Forests (*www.americanforests.org)*, National Tree Trust (*www. nationaltreetrust.org),* and the Environmental Action Coalition *(www.eacnyc.org*) to get information on how to get started.

Conduct a community tree inventory. Tree inventories can provide an accurate profile of the species and age of the community forest. Work with your County Forester to develop criteria for collecting data on street trees. Visit the Piney Woods Urban Forestry Program (*www.pineywoods.org/forestry/p287.htm)* where students at Piney Woods County Life School in Mississippi showcase their talents.

Forest Site Projects

Create a 'Guide to Local Forests' in your county or state. Check out information from the public library or talk with a forest ranger about the location, size, and use of forest lands in your area.

Start a 'Trailwalker Club.' One of the best ways to learn about forests first hand and to encourage others to do the same is to become a trail walker. See what the Florida Division of Forestry is doing to encourage people to visit Florida forests at *www.fl-dof.com/Recreation/Trailwalker* or visit South Carolina's trail program at *www.sctrails.net*.

Develop a management plan for your forest or natural area. First, find out if the land owner has a plan, then talk to him or her about different management objectives such as attracting wildlife and harvesting timber. Explore options for future forest management to satisfy the land owner's goals.

Get involved in the management objectives at a local forest or wilderness area. Talk to the forest manager and find out how you can get involved with management projects in your area. Each year managers must maintain recreational trails, cut brush, conduct prescribed burns, plant food plots, and build brush piles for wildlife.

Research alternatives to current management practices at a local forest or wilderness area. Look at current forest management practices such as fertilizing, invasive plant control, and disposal of hazardous wastes. Present possible alternatives to the forest manager and maintenance staff.

Conduct field surveys to document the location of invasive trees and other plants in the forest. Take photographs of invasive plants and create a bulletin board display at camp sites throughout the forest.

Adopt a trail. Support your local park, forest or trail association by volunteering time and labor in litter collection and trail maintenance activities. Contact the Department of Natural Resources for more information about adopting a trail in your area.

Celebrate the forest. Plan a forest celebration for one of the following events: Arbor Day, Earth Day, Forest Appreciation Week, or National Forest Products Week. Hold a poster contest and develop fact sheets on the importance of forests. Contact a park or forest manager to find how you can help celebrate the forest.

Educate forest neighbors. Prepare educational materials for citizens on forest practices like harvesting and prescribed burning. Develop an interactive forest trail with forest facts and natural history to teach about the local history and importance of the forests.

Step 5: Choose a service project

It's time to decide! Now that you know more about forest-related issues in your area, you can use the project ideas you generated to narrow your choices and select a service project.

Choosing a project

A. A good service project should match your personal skills and interests. Start by filling out the 'Skills Inventory' below. List any skills and interests that might be related to the ideas you brainstormed in Step 4. Skills are things you are good at or talented in such as giving presentations, writing letters, researching questions, and making posters. If you have trouble thinking of things, ask your friends and family to help. Everyone is good at something! Interests are hobbies and ways you like to spend your free time such as reading, camping, bird-watching, tracking animals, and gardening. In the third column, write down the resources you have access to that might be helpful to the project. Resources can include items such as time, a computer, gardening tools, or a bicycle. Resources are also people you know who can help such as a parent who is good at construction or a neighbor who works at a plant nursery. Once you've thought about your skills, share your inventory with the group.

Skills Inventory:

SKILLS	INTERESTS	RESOURCES
What are you good at?	What do you enjoy doing?	What is available?

B. Now, return to the list of possible projects your group brainstormed in Step 4 and match the groups' skills to the project ideas. Think about the different skills, interests, and resources each group member has to offer and how these match possible projects. For example, writing and computer skills may be better suited to a project whose goal is to produce educational information for homeowners rather than to plant trees.

To help you narrow your project choices:

1. Place a □ next to the projects that are especially suited to the skills of the group.
2. Place an □ next to the projects that address an important need in your area.
3. Next, look for the three □ you placed next to the project ideas and activities you were excited about doing (*see 'Before next time…' at the end of Step 4*) .

Do any of the projects have all three (□, □, □) criteria? If so, does the group agree to do this project?

☐ Yes ☐ Maybe ☐ No

This is just one way to narrow your possible project ideas. You can also vote on projects or rank them according to some other criteria to help you make a decision. If your group is not sure which project to do, you may need to find more information about the advantages and disadvantages of each project. Gather more information on the top two or three projects, then go back through the Skills Inventory and make the best match. If you have a large group and cannot decide on a single project, the group can divide and tackle more than one project. By the end of this step, each person should know what project they will work on.

C. Briefly describe your project in the 'Project Idea' box below. One way to get people to remember your project is to give it a catchy name or title. Next, write the topic or issue your group identified in Part B. Now think about what your group wants to accomplish and write a goal statement to reflect that idea. Goal statements are not always easy to write; you may want to revisit your project goal from time to time to see if you are on track or if your goal needs to be modified. Finally, go back to the list of project activities that need to be accomplished in order to complete this project and list them here.

Project Idea

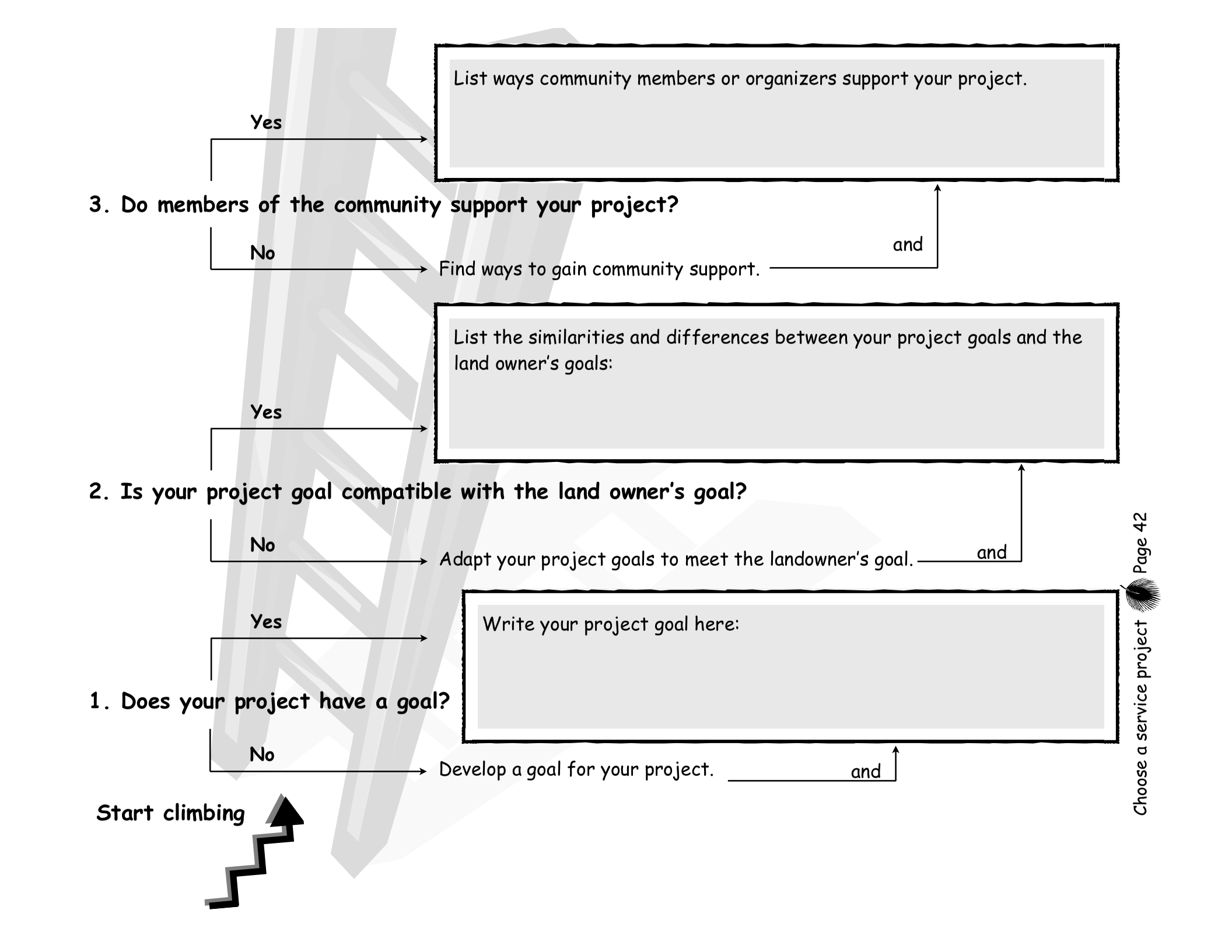
Project Title:

Topic or Issue:

Goal Statement:

Project Activities:

D. To confirm that you are ready to start this project, climb the 'Decision Ladder' for each project idea. Start at the bottom of the ladder with the question "Does your project have a goal?" and work your way up the ladder. Climb the Decision Ladder for each project idea your group is interested in pursuing. If you climb to the top, you've got a project!


List ways community members or organizers support your project.
Yes
3. Do members of the community support your project?
No
Find ways to gain community support.
and
List the similarities and differences between your project goals and the land owner's goals:
Yes
2. Is your project goal compatible with the land owner's goal?
No
Adapt your project goals to meet the landowner's goal.
and
Write your project goal here:
Yes
1. Does your project have a goal?
No
Develop a goal for your project.
and
Start climbing
Choose a service project
Page 42

Decision Ladder

Yes → Proceed to Part D.

6. Are you ready to commit to doing this project and excited about getting started?

No → Go back to your list of project ideas and select a different project.

Yes → List all available resources.

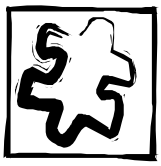
5. Are resources such as money, time, materials, transportation, and information available to help you achieve your project goals?

No → Modify your project goals to match available resources or identify a strategy to obtain the resources. and

Yes → List the organizations and their activities. How are your project goals compatible with their goals?

4. Are other organizations or groups working on similar projects?

No → Revise your project goals if you want to work with an organization or group. If you want to work alone, continue climbing. and



Make the connection

After you select a service project, answer the questions below and reflect on the process you used to get this far.

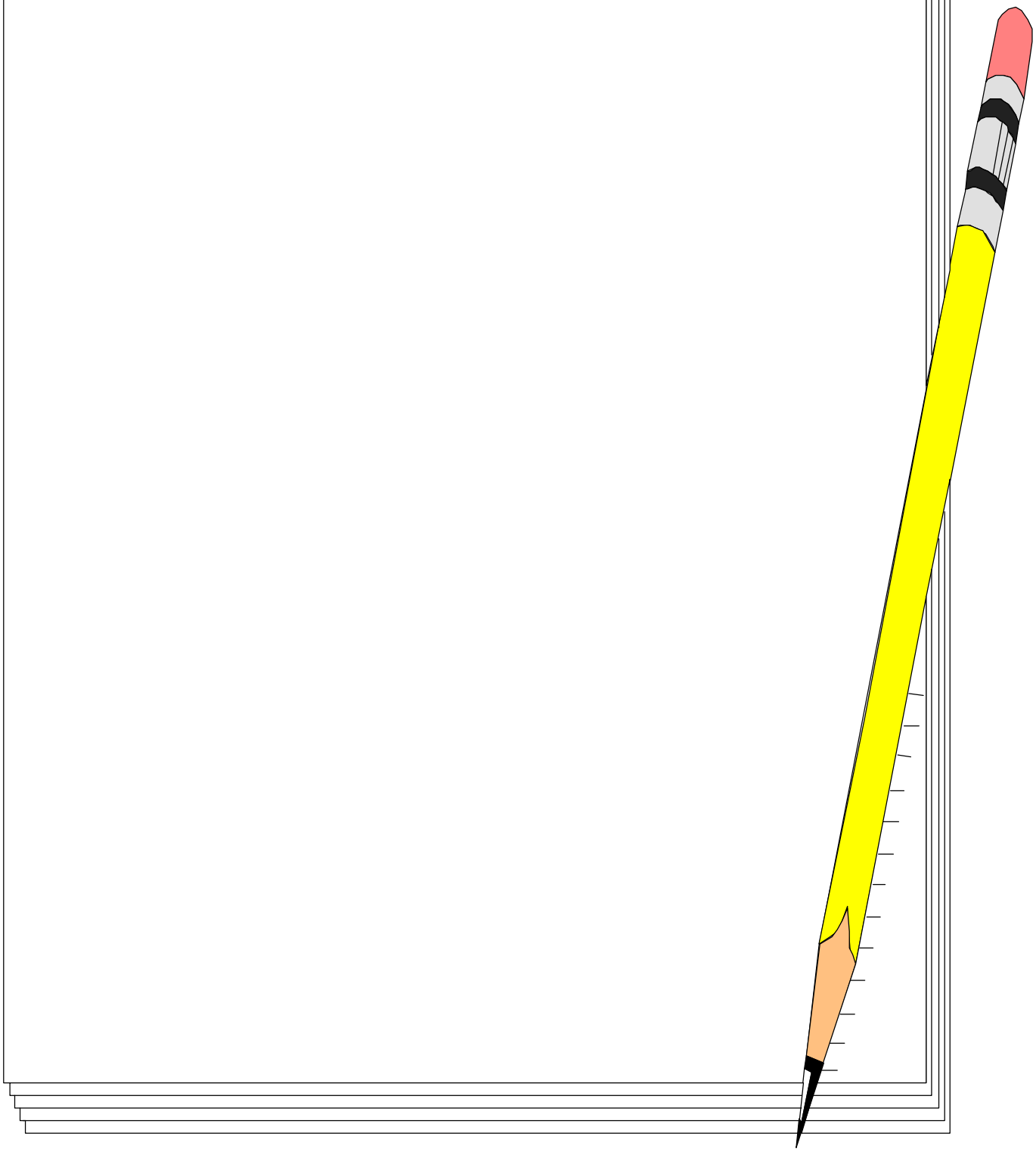
1. Why is it important to think about your skills, interests, and available resources before tackling a project?

2. What are some good reasons to reject a project idea?

Before next time...

- ☐ Read through Step 6 and think about how you might create a project plan.
- ☐ Invite a forest expert or local partner to join your group and help plan your project.

Step 5: Choose a service project
Questions, Notes, Comments, Ideas



Step 6: Project plan

Now that you've chosen a project, you need to create a plan of action. Your 'Project Plan' is similar to a recipe with an ingredient list and a set of directions so your outcome will be successful. Use the exercises you worked through already, such as the Mind Map (Step 4), Decision Ladder (Step 5), and Project Idea box (Step 5) to help develop your Project Plan. Think of your plan as a working document that you can revise as you learn more.

Create a plan of action

A. To help you fill in the Project Plan on page 50, you may find it helpful to organize your ideas about individual activities needed to complete your project. First, write your project title and goal at the top of a large piece of newsprint, then list all the things you will need to do to accomplish your goal. Use the information from your Project Idea box in Step 5 to get started. See the example on the next page. Group similar activities or tasks together and give each group a label, for example 'Task 1: Equipment Needed.' Then consider each task and list resources like tools, information, and people you'll need to get the job done. It may be helpful to write your ideas in the form of a question or things you'll need to know more about before starting the project. Prioritize the lists under each task so that the first item on the list will be accomplished before the other items on the list.

Project Title

1. Write your project goal:

2. List the activities and items needed to complete the project:

3. Group similar activities and items together:
   Task 1 -
   Task 2 -

4. Consider each task individually and brainstorm additional activities that need to be done to accomplish the task. Prioritize the items under each task.

For example: A middle school science club partnered with the Native Plant Society, the City Arborist, and the City Beautification Board to conduct the Great Air-Potato Roundup. The air-potato is an invasive exotic vine that is taking over a local park.

Project Title: The Great Air-Potato Roundup

1. **Write your project goal:** Remove the invasive air-potato (Dioscorea bulbifera) from the park.

2. **List the activities and items needed to complete the project:**

□□□□□permission from the Parks Department	□□gloves
□□□□□potential dates for the roundup	□□volunteers
□□□□□shovels	□□insect repellent
□□□□□clippers	□□sun screen
□□□□□newspaper story on invasive plants	□□snacks
□□□□□public information (Extension bulletin)	□□water
□□□□□garbage bags	□□hats, visors

3. **Group similar activities and items together:**
   - Task 1: Get permission from the City Parks Department
   - Task 2: Gather Equipment - shovels, clippers, gloves, water, snacks
   - Task 3: Recruit Volunteers
   - Task 4: Collect information on invasive plants - newspaper articles, public information like Extension bulletin, and newsletters
   - Task 5: Have a safety plan for insect bites, traffic, heat, and poison ivy. Make sure we have water, food, and sun screen.

4. **Consider each task individually and brainstorm additional activities that need to be done in order to accomplish the task. Prioritize the items under each task.**

Task 1: Get permission from the City Parks Department

Get a list of possible dates for the project
Ask for a tour of the park

Questions we need to ask:

What is the best way to remove air-potatoes so they will not grow back?
How do we dispose of the air-potatoes after we collect them?
Do we need special equipment?
Can we do this by hand or do we need to use herbicide?

Task 2: Gather equipment

shovels	clippers
large coolers for water	cups
garbage bags	snacks
gloves	sun screen

Things we need to find out:

Will the City Parks Department lend us the equipment for the project?
Where else can we get this equipment?
Should we ask volunteers to bring extra equipment?
How much equipment should we bring?

B. Use the newsprint sheets and your notes from Part A to copy the information you brainstormed into the Project Plan. This will help each person in the group Remember what tasks they are responsible for completing and when they need to be accomplished. It's okay to change your plan later, but it is important to make a plan so everyone knows their duties and deadlines.

1. Put the names of your group members, the project goal, and the project title at the top of the Project Plan on page 50.

2. In the first two columns, list the tasks or activities and what needs to be done to accomplished them. Extend the chart to include all your tasks.

3. Once the tasks and activities are listed, ask group members to volunteer to do particular activities. Look back on your Skills Inventory in Step 5 to match individual people with tasks.

4. In the last column, determine when each task should be accomplished. Use the timeline on page 51 to help you decide when things should be done.

Timeline Write today's date above the start date on the 'Timeline' on page 52. Think about when the project needs to be done and write the date you expect to finish. How many months will it take from start to finish? Using your timeline, figure out when you need to complete each task. It often helps to start at the end date and work backwards. For example, if you were planning a Great Air-Potato Roundup, how much time before the project would people need to know about it so they can plan to volunteer? If they need to know two weeks in advance, then you must distribute all posters, radio announcements, and fact sheets then. You'll also need to figure in the amount of time needed to produce these items. Go back to the Project Plan and fill in expected date of completion for each activity.

Safety plan Think of ways in which someone may get hurt while participating in your project. What can you do to prevent them from getting hurt? What are other potential dangers? Write your strategies for keeping people safe in the 'Safety Plan' box on page 51.

C. Ready, Set, ACTION! Now you are ready to start your project. If you get stuck, look in Step 7 for ideas to help you and your group stay on track, check out the Skills Bank, or ask your leader for help.

Remember to schedule periodic meetings to discuss the project and make sure everyone is following the plan. Create a calendar and post it in a group meeting place to keep track of project deadlines and accomplishments.

Give Forests a Hand Project Plan

Group members:
Project goal:
Project title:

Tasks or activities	What needs to be done?	Team member(s) responsible	By when?

Your Timeline

Start date

Finish date

Safety Plan

Make the connection

After filling in your Project Plan, answer the questions below. Try to answer them by yourself, then share your answers with the group at the next meeting.

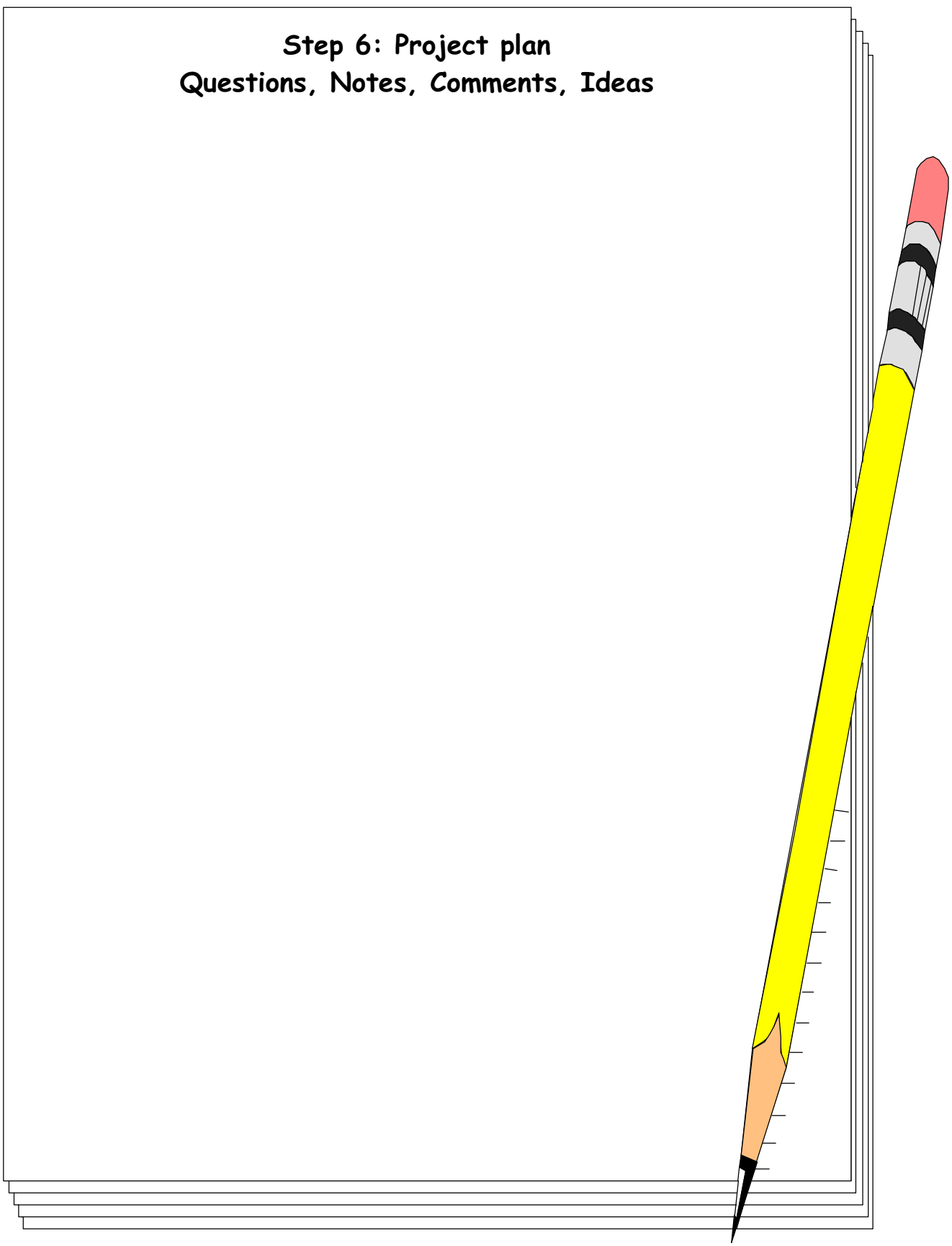
1. Why is it important to list the major tasks, activities, people responsible, and date to be completed in your project plan?

2. Did you run into roadblocks or obstacles when planning your project? What did you do or should you have done to overcome the obstacles?

Before next time.....

- ☐ Read Step 7 to help you keep on track and deal with obstacles while implementing your project.
- ☐ Schedule regular meetings to help everyone stay on track. Be sure to invite your project partners to your meetings.

Step 6: Project plan
Questions, Notes, Comments, Ideas



Step 7: Keep on track

You've researched a forest-related issue, considered it from a variety of viewpoints, created a project, debated its merits, made a decision, developed a project plan, and launched your project. This step will help keep you on track as you proceed. Be sure to check back here from time to time and use the Skills Bank on page 64 for help with solving problems.

A. One of the best ways to help your group stay on track is to hold regular meetings. As a group, review your Project Plan each meeting. Remember that your plan is a guide, not a rule book. You made a plan so that everyone in your group knows what everyone else is trying to accomplish. But things rarely go exactly as planned and you'll need to make changes as you proceed.

The key to the success of your project is **COMMUNICATION!**

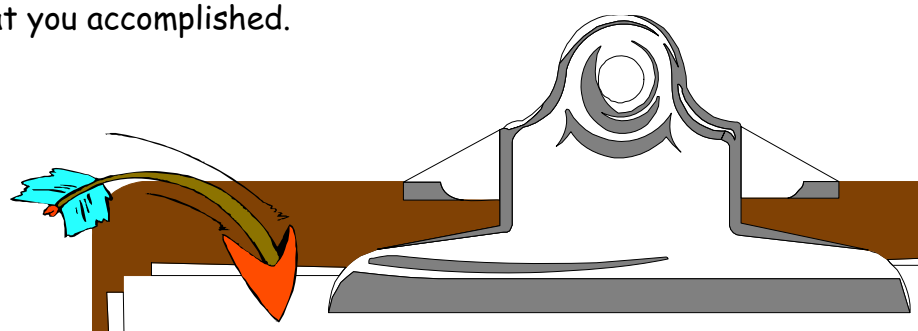
Communicate with your group. Everyone in your group must know what is going on. Talk to each other often. The *Leader Guide* also has helpful information for your group, such as team-building exercises.

Communicate with experts. Invite local experts to come and speak with your group. Keep in contact with these experts and develop a good working relationship. Experts who help your group probably know other people who can help, too.

Communicate with your community leaders. Get to know people in different agencies and organizations. Civic groups, like the Kiwanis and League of Women Voters, may be helpful in carrying out your project. The more people you know, the more likely one of them will know how to help.

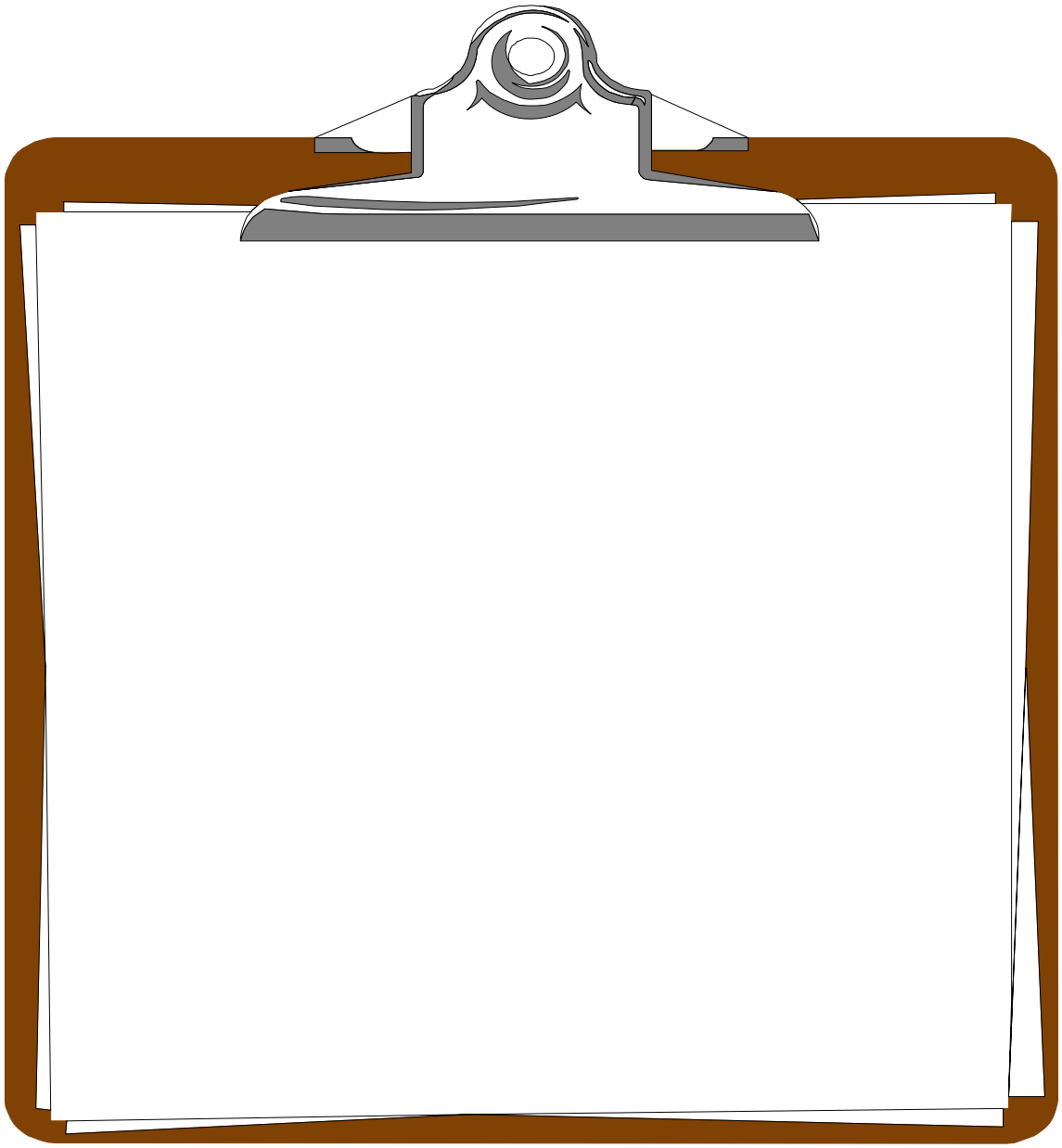
B. Plan how you will measure and record your success. People are more likely to give permission, volunteer, and provide resources when you have a history of success. Newspapers, radio, and TV stations are more likely to report on your work if you can show evidence of your project's success. Other young people may get excited and want to join you. And for you - keeping track is a way of seeing what you accomplished.

Think about different ways you can show what you have done, and start measuring them. Here are some ideas:



- ☐ Count the number of trees planted or the number of invasive exotic plants removed.
- ☐ Count the number of people that helped your group - experts, family members, teachers, and friends.
- ☐ Count the number of hours each person worked on the project and the total number of hours it took to complete the project. Include your planning time.
- ☐ Draw pictures, take photos, or videotape your work.
- ☐ Get feedback from the principal, local partners, experts, or other students who helped with the project.
- ☐ Get letters from people you helped.
- ☐ Write a short story or song about your project.
- ☐ Make a bulletin board display or web page about your project. Include your site map, information from your checklists, and a description of your project.
- ☐ Give tours or demonstrations to show parents, school officials, and reporters.
- ☐ Make a scrapbook that chronicles your project.
- ☐ Use your responses to the 'Make the connection' section at the end of each step to tell the story of what you learned.

What types of information could you collect to show that your project is making a difference?



C. Get past roadblocks. Keep your project goal in mind and think creatively about how to solve problems. Remember that it's okay to change your plan, but it is still important to have one. Make sure you understand the cause of the problems: Did someone quit because they were not enjoying the project? How can you make the process more fun for everyone? Are you running out of resources like money or time? Can you partner with other agencies, raise money, or re-scale your project to match the resources you have?

Make the connection

Even though you have started your project and have begun collecting data, it is still important to reflect on what you have accomplished and what you are going to do next.

1. What's the connection between your project goal, the activities you've conducted, and the information you've collected?

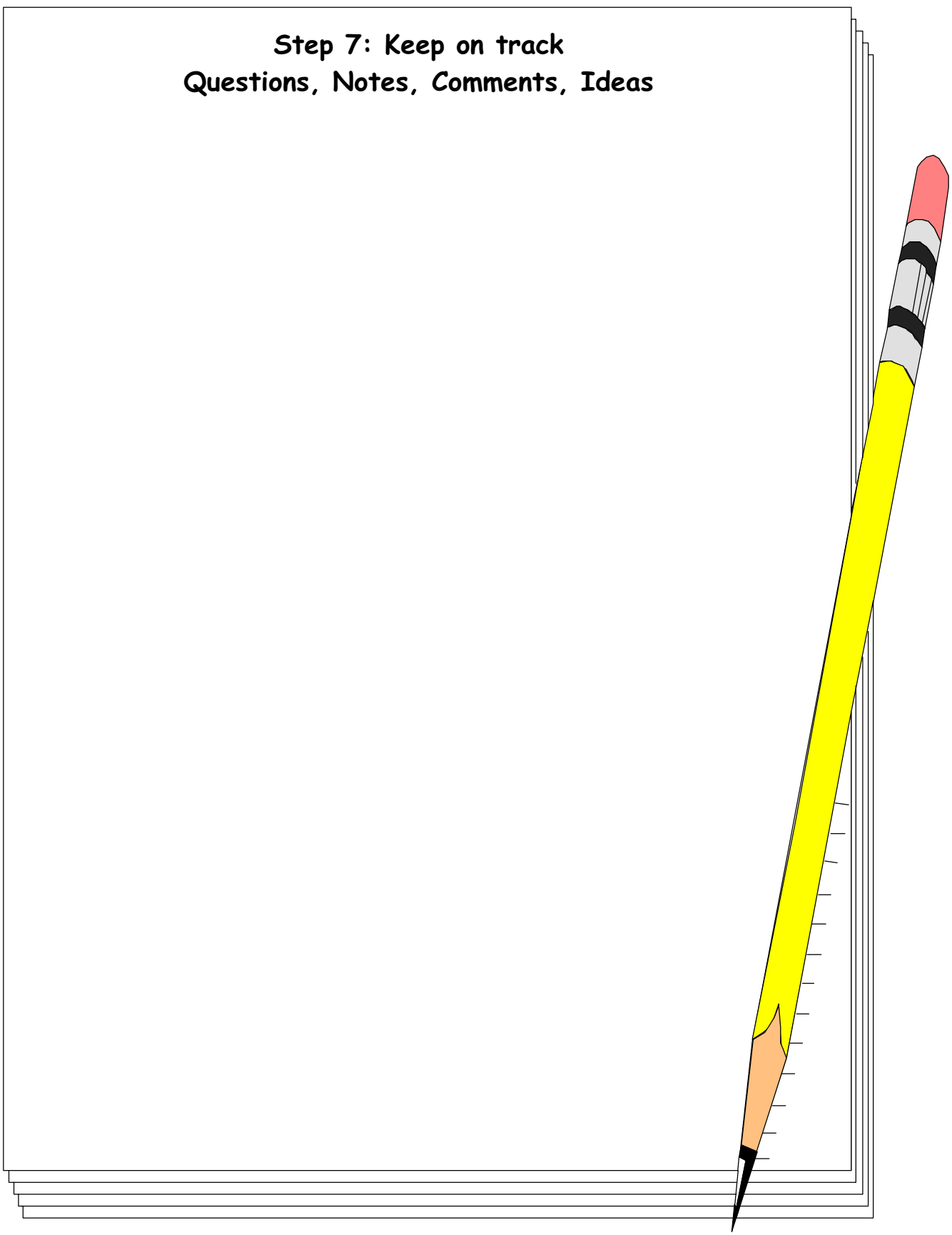
2. What are some ways in which you could share your project's success with others?

3. How well are you communicating with your peers and outside experts? How can you improve?

Before next time...

- ☐ Think about ways in which you might share your project success with other people.
- ☐ Read Step 8 and complete the reflection questions on page 59.

Step 7: Keep on track
Questions, Notes, Comments, Ideas



Step 8: Celebrate success

Your project is a chance for you to learn, have fun, and do something important for your community. It is also an opportunity to learn how to do an even better job the next time you tackle an important issue or problem. This type of learning can't come from an outside expert. It must come from you and your group thinking and talking together.

A. Reflect on your accomplishments. Have a group discussion about what you have seen, heard, felt, and learned as you conducted this project. Share your thoughts about your experiences.

- What was the most fun thing that happened? The least fun?

- What were your biggest roadblocks? How did you get past these roadblocks?

- What did you learn about yourself through this experience?

- What new skills can you add to your skills inventory?

- How do humans affect the plants and animals in your forest?

- How did your actions affect other people?

How has your project made a difference?

What advice would you give to another group working on a similar project?

What, if anything, would you do differently next time?

What other issues or projects would you like to work on?

After reflecting on the project, think about ways in which you could share your project work with others. In the box below, list several ways you could let your parents, friends, school, and community know about your work.

B. Celebrate! After all your hard work to *Give Forests a Hand*, it's time to celebrate. Not only is celebration fun, but it is a good way to say thank you to people who helped you accomplish your goals. Invite newspaper and radio reporters to your celebration - if they run a story on your success, a lot of people will hear about your project and its importance to the community. Use your imagination. It is your celebration and you have earned it!

Here are some ideas for local celebrations:

Invite newspapers and TV stations to see what you have done

Hold a pizza party

Write a story for the community newspaper

Give out awards

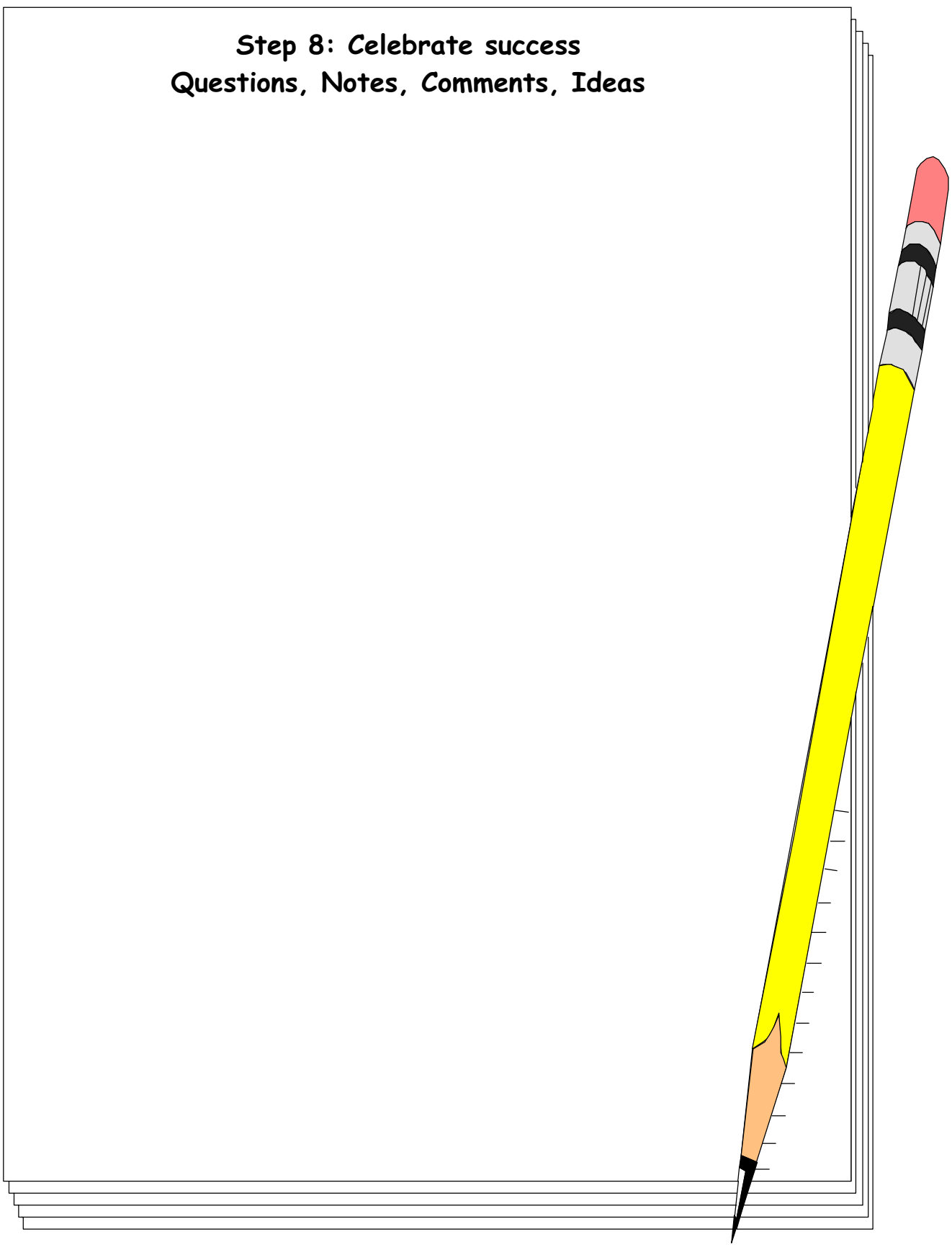
Spend a day hiking in a forest or camp out for a night

Make t-shirts for group members with your group name

C. One of the best things about finishing a project is that you have all sorts of new contacts, information, and skills. You've proven that you can do something important as a team. You may even want to start a new project. There is always more to be done! You don't have to start over from the beginning. Look at your checklist, mind map, and project notebook. Talk to your partners and other people you have worked with. Would they like to help again? What ideas do they have? What is another important need or project?

Create a Mind Map, climb the Decision Ladder, make a new Project Plan, and **GO FOR IT!**

Step 8: Celebrate success
Questions, Notes, Comments, Ideas



Skills Bank

It is impossible to foresee all the needs that might come up during your service project. Here are some ideas for helping you sharpen the skills you might need to complete projects.

Brainstorming A technique to generate a lot of ideas, no matter how goofy. There is more than one way to brainstorm. Here are a couple of ideas. Brainstorming is usually followed by some sort of priority setting and/or categorizing.

Traditional - Quickly come up with ideas in a set amount of time. Have someone write them down. This method generates a lot of ideas quickly.

Brain Hurricane - Post large sheets of paper (or divide a blackboard into sections) with a topic written on each one. Group members move from one to another and write their best ideas. This method allows everyone to contribute and to focus on the topics they know best.

Guidelines for Brainstorming - Do not criticize each other's ideas. There are no "bad" ideas at this point. Write all suggestions exactly as they are spoken. Build on the ideas of others. Silence may mean everyone is thinking ~ don't be afraid of it.

Working as a Team One key to completing your project is working together as a team. Each of you will need to be a leader, and at the same time, each of you will have to be a supportive follower. Take turns at each of the roles below.

Roles in successful groups

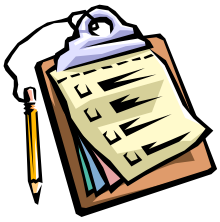
Recorder: Take notes of important ideas. Write group decisions. Read back what you write so everyone can say whether you got it right.

Timekeeper: Help set realistic blocks of time to discuss each item on the agenda: 20 minutes for progress reports, 10 minutes to pick the date for the final party, etc. Watch the clock and remind group members when time is up.

Participation checker: Watch to see that everyone gets a chance to talk and that group members don't interrupt each other. Offer feedback at the end of the meeting about how the group did.

Facilitator: Set the agenda, with input from the group. Make sure everyone understands the goals of the meeting. Keep everyone working on task.

Tips on Taking Notes You'll need to write down a lot of information to complete your projects. It would be very frustrating if you lost the name and phone number of the person who promised to donate ten maple trees after you spent two hours tracking them down. You can't remember everything, so you need to keep and organize notes.



- Write in your notebook, not on little pieces of paper. If you already have a lot of little pieces of paper, copy the information or tape the notes into your notebook.
- Date each entry so that you know which information is most recent.
- Don't write every word someone says. Think like a reporter. Answer the most important questions: "Who?" "What?" "When?" 'Where?" and "Why?"
- Look back over your notes as soon as you're finished to make sure you haven't left out anything important and that you can read your own writing.

Tell Your Story You will need to tell people what your group is doing. You may have to explain it to forest experts so they know how to help or you may want to speak to a school assembly. Practice making a short, coherent speech about your project.

1. Prepare. Think about who you will be talking to and what you want them to know.
2. Make a list of words to remind you of key points and number them.
3. How much time will you have? Practice once or twice with a clock.
4. Speak slowly and clearly. Make sure your voice carries to the back of the room.
5. Pictures, videos, and other evidence of your work will get attention. Think about what you can do to make your presentation interesting and memorable.
6. If you will be speaking to a school board or other official group meeting, find out whether they have procedures or rules you need to follow as you speak.

Getting Resources Over the Phone The telephone is an important tool for anyone who wants to get things done. Keep a list of all the people whose numbers you call. Your group leader should keep a master list and group members should write names and numbers in their notebooks.

- Learn to use the phone book. The yellow pages list businesses by category, the blue pages list government agencies, and the white pages list residents. If your phone book has gray or red-edged business pages, this section will also list nonprofit organizations.

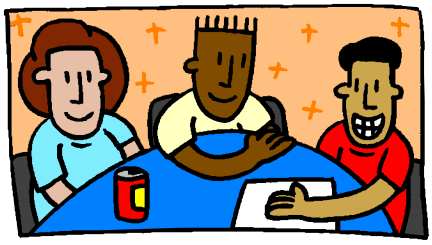
- Get permission to use the phone, especially if you will be making long distance calls.
- Write out an introduction such as: "Hello. My name is Lucy Chen, and I'm from the Easton County 4-H Forestry Club. We are working on a project to restore the vacant lot on the corner of Main and Elm Street, and we hope you might be willing to help us." Repeat this information if your call is transferred to a new person.
- Write down all your questions, including what you need from the person or organization.
- Write down the information you get. Repeat information like phone numbers or addresses to check that you heard them correctly.
- Before you hang up, thank the person for helping your group. Send a thank-you note if they are especially helpful.
- If the person you are calling is not available, leave a short message with your name, phone number, and reason for calling.
- If your contact hasn't returned your call in a day or two, call again. As long as you're polite, it's okay to call until you've reached someone.

Conducting an Interview The key to a successful interview is **PREPARATION**. The following information should help you as you plan the interview.

Plan the interview

- Who should you interview? It's not always easy to find the person who has the information you need. The information you've collected so far should give you an idea of who to contact. Search for existing information on the interviewee or the organization where he or she works.
- Call to set up the interview. Introduce yourself and give a brief explanation of your project. Make sure you ask if they are the appropriate person to talk with, if not, ask for a list of other people to contact. Select a time and go to their office, or a meeting place that is convenient for the interviewee.
- Write a draft of the interview questions. Start with questions that are easy to answer. Try not to ask questions that call for a simple yes/no responses - rephrase them to get more thoughtful answers.
- Practice the interview questions with your group and get feedback from them. What other questions should you ask to get the information you need? Revise the script to improve the order, content, and pacing of the questions.

Conduct the interview



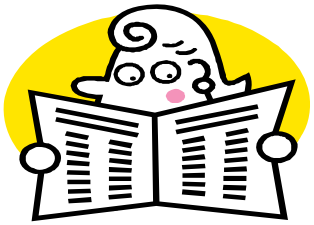
1. Arrive early and dress appropriately.
2. Introduce yourself.
3. Give a brief explanation of your project. Ask your interviewee for information and suggestions about projects you can do in your community. Take notes and/or tape record the interview. Be flexible with the script. You may want to pursue new questions as you learn more information.
4. If the interviewee's answers are vague or misdirected, try rephrasing your question to be more specific about what you're after. It's okay to ask the interviewee to clarify his or her responses.
5. Conclude the interview by thanking your expert and ask if you can call back if you have questions in the future.
6. Send a thank-you note; it's a good way to be remembered positively.
7. After the interview, review your notes and highlight important points. Add your observations like when the person frowned or smiled.

Working with the Media News organizations generally like to cover projects by young people, especially if they can get interviews or interesting pictures of kids doing activities.

⇒ Write a brief description with your main points.

What message do you want to get across?
Why is this event important?
How will it affect people and the environment in this community?
Tell who's doing it, what your project is about, and why it's happening.

⇒ Put the description in a news release, or a one-page memo, and send it to local news organizations. Get media phone numbers from the yellow pages of the phonebook, then call to get names of the reporters covering the environmental or youth beat, and their addresses or fax numbers. Don't be afraid to talk to the reporter directly. If he or she is busy, arrange a time to call again. Send your press release two weeks before an event, then follow up with a phone call the day before.



Glossary

Aesthetic - pleasing appearance.

Arborist - a person who manages and cares for trees and shrubs.

Circumference - the perimeter or external boundary of a circle.

Compost - partially decomposed organic matter. Compost results from the breakdown of organic material such as grass clippings, leaves, and food scraps by bacteria, fungi, worms, and other organisms.

Deciduous - a plant that loses all its leaves during a certain season.

Exotic - a species introduced to an area, purposefully or accidentally, where it has not previously occurred naturally.

Fertilizer - a substance, such as manure or a chemical mixture, used to nourish plants and enrich the soil.

Infrastructure - the underlying foundation or basic framework.

Invasive - a species that is expanding its distribution in areas where it has not previously been found.

Management objectives - an aim, goal, or purpose to be achieved.

Mulch - any material placed on the soil surface around plants to moderate the soil environment and/or enhance landscape aesthetics.

Native plants - plants that have evolved in place over geologic time and are distributed across the landscape largely in response to climate.

Nutrient - elements necessary for growth and reproduction. Primary plant elements are nitrogen, phosphorous, and potassium.

pH - the measure of a solution's acidity or alkalinity on a scale of 1-14; 1-6 indicates acidic solution, 7 is neutral, and 8-14 indicates an alkaline solution.

Prescribed burn - an intentionally set fire used to achieve a forest management objective. These objectives might include restoring the ecosystem, enhancing wildlife habitat, reducing competition from young saplings, reducing the amount of leaf litter or fuel accumulated on the forest floor, or suppressing an insect infestation.

Pulpwood - wood used in the manufacture of paper, fiberboard, or other wood products. Pulpwood trees are usually a minimum of 4 inches in diameter.

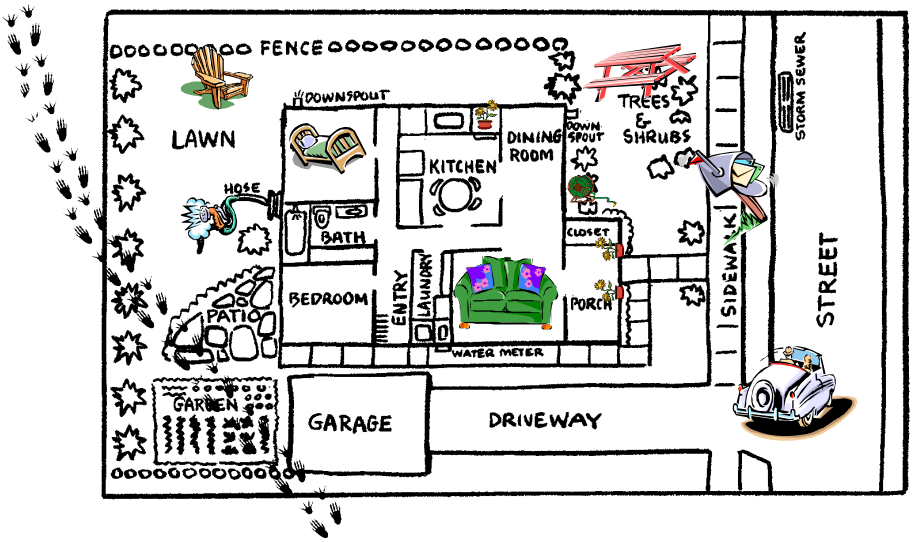
Runoff - the portion of precipitation on land that ultimately reaches streams, often carrying dissolved or suspended material.

Saplings - a young tree, one not over 4 inches in diameter at a height approximately 4.5 feet above the ground.

Snag - a standing dead tree from which most of the branches and leaves have fallen.

Sustainable - a method of harvesting or using a resource so that the resource is not depleted or permanently damaged.

Home Checklist



In order to answer these questions, you will need to ask the people responsible for the trees and forests in your neighborhood. These people may include your parents, lawn service workers, a city arborist, an urban forester, your neighbors, or your landlord - whoever maintains or cares for the landscape. Your group can do the whole checklist together at one person's home and surrounding neighborhood, or break into teams and go to several different neighborhoods.

1. Are there trees in your home landscape and the surrounding neighborhood?

Are there places to plant trees?
□□□□□Yes ❑ No

Do the homeowners want more trees?
□□□□□□Yes □□No

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

2. Do the trees in your landscape or neighborhood provide benefits to the homeowners?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

3. Are tree islands planted around your home and in the surrounding neighborhood?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□Very Important □□Kind of Important □□ Not Very Important	

Three well placed trees around a house can cut air conditioning costs up to 50%.

Tree islands are areas within the landscape used to group plants with similar maintenance needs. Trees islands in lawns can be used to slow water runoff flowing into storm drains and reduce the amount of grass that needs to be mowed.

4. Are native trees and shrubs planted around your home and the surrounding neighborhood?

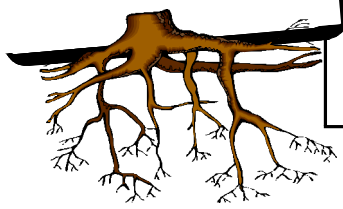
Can you identify native trees in your area?
□□□Yes□□□□□No

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority - □□Very Important □□Kind of Important □□ Not Very Important	

Native plants are adapted to the climate and soil conditions of a given area. Natives usually have fewer pest problems and can decrease the need for pesticides and fertilizers.

5. Is there evidence of tree damage caused by cars or lawn maintenance practices?

Look for:
□□damaged caused by string-trimmers or mowers
□□mulched piled against the base of trees
□□compacted soil from vehicles or walking paths
□□exposed roots



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

6. Are fertilizers used only when needed?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Are soil nutrient and pH levels tested to determine if there is a need for fertilizer?
□□Yes □□No

Are slow-release fertilizers like tree spikes and organic fertilizers used?
□□□□□□□□Yes □□No

Integrated pest management (IPM) is a pest control strategy which focuses on preventing or suppressing pest populations before they get out of control. Selecting pest-resistant plants, identifying pests before applying chemicals, treating only the affected areas, and keeping records of pest problems are all practices homeowners can do to prevent pest problems.

7. Are pesticides used only when needed?

□□□Looking Good!	□□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Are landscape plants routinely checked for pest problems?
□□Yes □□No

Are pests identified before applying chemicals?
□□□□□□□□Yes □□No

Is there a system to alert neighbors of a pest out break?
□□□□□□□□Yes □□No

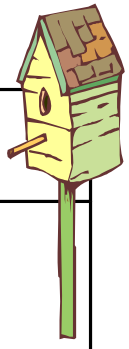
8. Are water conservation practices used when caring for the lawn and garden?

Does the homeowner:
- ☐☐use a soaker hose or drip system to apply water directly to the soil
- ☐☐have a rain shut-off device
- ☐☐use mulch to retain moisture
- ☐☐plant trees and shrubs adapted to the local climate☐
- ☐☐practice the principles of Xeriscape™

☐☐Looking Good!	☐☐We need more information.
What we found out -	
We need more information about -	
Priority -☐☐☐☐☐☐☐Very Important ☐☐Kind of Important ☐☐ Not Very Important	

Xeriscaping™ is a method of landscaping to conserve waster and protect the environment. It includes a landscape plan, soil analysis, appropriate plant selection, practical turf areas, efficient irrigation, mulching, and proper maintenance.

9. Are food, water, and shelter available for wildlife?



Look for:
- ☐☐plants that provide cover or nesting
- ☐☐plants that provide food, like berries, acorns, and leaves
- ☐☐a water source such as a pond, bird bath, or stream

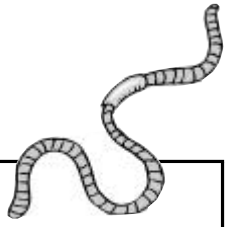
☐☐Looking Good!	☐☐We need more information.
What we found out -	
We need more information about -	
Priority -☐☐☐☐☐☐Very Important ☐☐Kind of Important ☐☐ Not Very Important	

The key to attracting wildlife is to provide the four basic components of their habitat: food, especially native plants; water, to drink and bathe in; cover or shelter to escape predators, rest, and build nests; and space, to live and raise young.

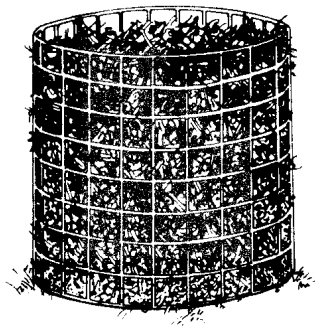
10. Is there a curbside recycling program for paper, newspaper, and cardboard in your neighborhood?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

11. Are leaves and other yard waste <u>composted?</u>



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	



Composting is the breakdown of organic matter like grass clippings, leaves, and food scraps by bacteria, fungi, and other organisms.

12. Your question: _____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

13. Your question: _____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Make the connection – The questions below will help you reflect on, or think about the information you collected in this checklist. Use the information you gathered to answer the questions on your own, then discuss your answers with the group. Did they reach the same conclusions? Do you need more information to answer the questions?

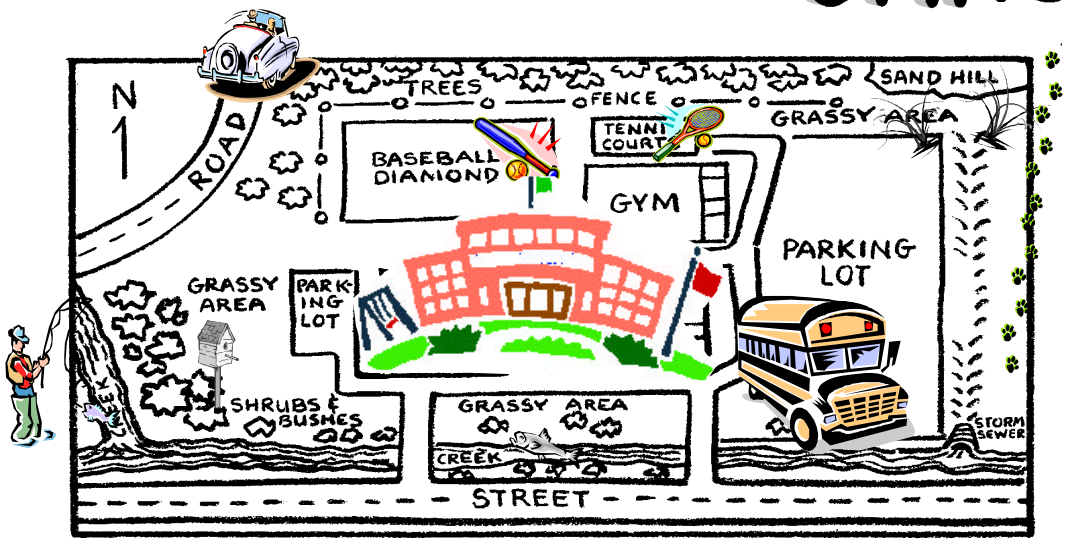
1. Evergreen and deciduous trees provide different benefits. When would you plant one type of tree (evergreen or deciduous) instead of the other?

2. What is a good reason to plant a non-native tree in your landscape instead of a native tree?

3. If paper were efficiently recycled and the need for cutting trees were reduced, how would this affect forest landowners in your area?

4. What would happen if leaves, twigs, and grass clippings did not decompose?

School Checklist



In order to answer these questions, you will need to ask the people who are knowledgeable about the trees and forests in the school yard. These people may include a teacher, custodian, grounds keeper, County Extension Agent, or urban forester - whoever is responsible for the care and maintenance of your school's trees and forests.

1. Is there access to a forest area near your school?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Are there trails for you to explore the area?
□□□□□Yes □□No

Are there places for classrooms to meet?
□□□□□Yes □□No

2. Is there a management plan for forested areas on the school ground?

Does the plan include ways to:
□□□harvest resources
□□□maintain forest health
□□□increase wildlife habitat
□□□thin trees
□□□conduct a prescribed burn□

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Fire plays an important role in many forest ecosystems. Prescribed fires are often planned to mimic the natural process that fire plays in an ecosystem.

3. Does the school have a maintenance plan for the landscaped areas of the school grounds?

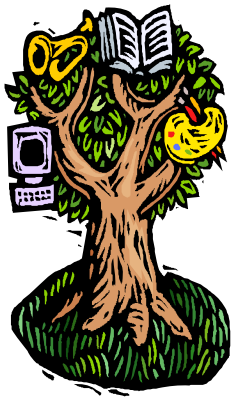
Are some areas left unmowed?
□□Yes □□No

Are low-growing trees and shrubs planted under power lines?
□□□□□Yes □□No

Does the maintenance staff spread sand rather than salt on ice-covered sidewalks?
□□□□□Yes □□No

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

4. Do shrubs and trees planted on school grounds provide benefits to school staff and students?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority - □□Very Important □□Kind of Important □□ Not Very Important	

Do the trees provide:
□□□noise reduction
□□□wind breaks
□□□privacy
□□□beauty
□□□shade□
□□□What else?

5. Are native trees and shrubs planted on school grounds?

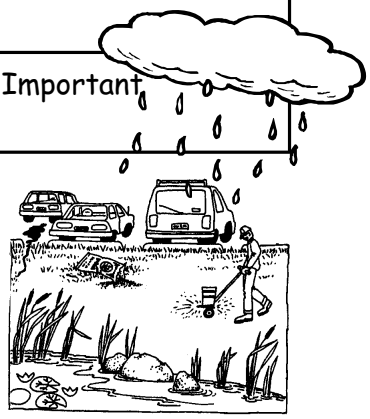
Can you identify native trees and shrubs?
□□□Yes □□□□No

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□□Very Important □□Kind of Important □□ Not Very Important	

<u>Invasive</u> plants like Melaleuca and purple loosestrife displace native vegetation and change the ecology of an area.

6. Are forested areas planted around school grounds and in the parking lot to reduce surface runoff into streams and ponds?

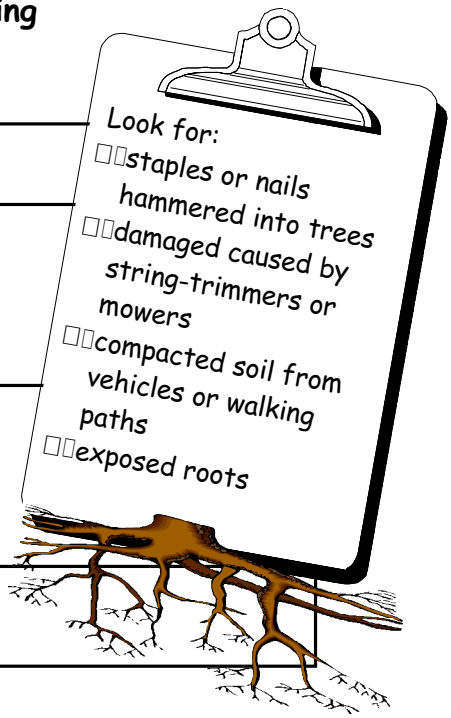
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	



Rain and irrigation runoff can carry soil, fertilizer, and pesticides from your school yard into storm drains that lead to bays, rivers, and lakes. These substances can harm water quality and wildlife habitat. Planting trees and other vegetation can slow the runoff and allow water to filter through the ground.

7. Is there evidence of tree damage caused by cars, walking paths, or lawn maintenance practices?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	



8. Are the school grounds <u>fertilized</u> only when needed?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Are soil <u>nutrient</u> levels and <u>pH</u> levels tested to determine if there is a need for fertilizer?
□□Yes □□No

Are slow-release fertilizers like tree spikes and organic fertilizers used?
□□□□□□Yes □□No

Soil pH influences factors that affect plant growth such as soil structure, nutrient leaching, and nutrient availability. Contact your Count Extension Office or Soil and Water Conservation District for information on soil testing.

9. Are <u>pesticides</u> used only when needed on the school grounds?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Does the maintenance staff routinely check landscape plants for pest problems?
□□Yes □□No

Are pests identified before applying chemicals?
□□□□□□Yes □□No

Is there a system to alert neighbors of a pest outbreak?
□□□□□□Yes □□No

Integrated pest management (IPM) is a pest control strategy which focuses on preventing or suppressing pest populations before they get out of control. Selecting pest-resistant plants, identifying pests before applying chemicals, treating only the affected areas, and keeping records of pest problems are all practices that help prevent pest problems.

10. Does your school have an efficient irrigation system for watering school grounds?

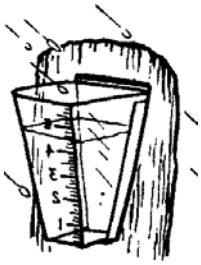
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about - 	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Does the maintenance staff:
□□use a soaker hose or drip system to apply water directly to the soil
□□have a rain shut-off device
□□apply mulch to conserve water
□□plant trees and shrubs adapted to the local climate□
□□practice the principles of Xeriscape™

Xeriscaping™ is a method of landscaping to conserve waster and protect the environment.

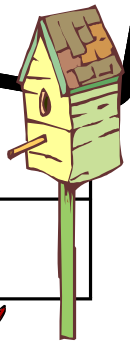
The 7 principles of Xeriscape™ :

- Planning and design
- Soil improvements
- Efficient irrigation
- Appropriate plant selection
- Mulching
- Practical turf areas
- Appropriate maintenance

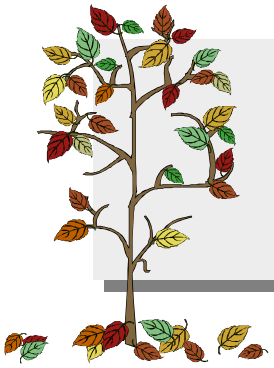


11. Do your school grounds provide habitat for wildlife?

Look for:
- ☐☐plants that provide cover or nesting
- ☐☐plants that provide food, like berries, acorns, and leaves
- ☐☐a water source such as a pond, bird bath, or stream



☐☐Looking Good!	☐☐We need more information.
What we found out -	
We need more information about -	
Priority -☐☐☐☐☐☐Very Important ☐☐Kind of Important ☐☐ Not Very Important	



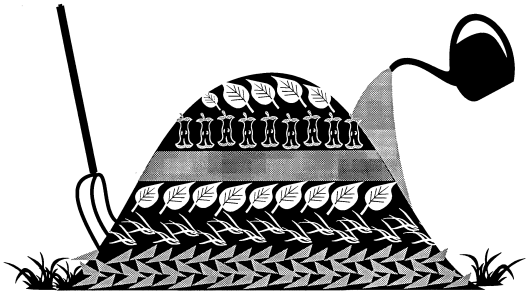
The key to attracting wildlife is to provide the four basic components of their habitat: food, especially native plants; water, to drink and bathe in; cover or shelter to escape predators, rest, and build nests; and space, to live and raise young.

12. Does your school recycle paper, newspaper, and/or cardboard?

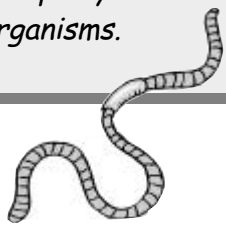
☐☐Looking Good!	☐☐We need more information.
What we found out -	
We need more information about -	
Priority -☐☐☐☐☐☐Very Important ☐☐Kind of Important ☐☐ Not Very Important	

13. Does your school <u>compost</u> grass clippings, tree leaves, and branches?

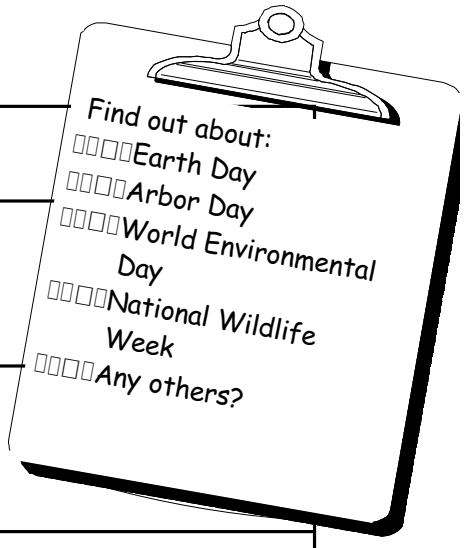
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	



Composting is the breakdown of organic material like grass clippings, leaves, and food scraps by bacteria, fungi, and other organisms.



14. Does your school celebrate environmental holidays?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

15. Is environmental education taught at your school?

Does your school have an:
□□□□Envirothon team
□□□□Environmental club
□□□□4-H forestry or environmental club
□□□□Environmental studies class

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Envirothon is a national environmental education competition. School teams compete with one another in five subject areas: wildlife, forestry, soils, aquatics, and current environmental issues. For more information visit www.envirothon.org

16. Your question: _____

_____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Make the connection – The questions below will help you reflect on, or think about the information you collected in this checklist. Use the information you gathered to answer the questions on your own, then discuss your answers with your group. Did they reach the same conclusions? Do you need more information to answer the questions?

1. What types of information would you include in a forest management plan for your school?

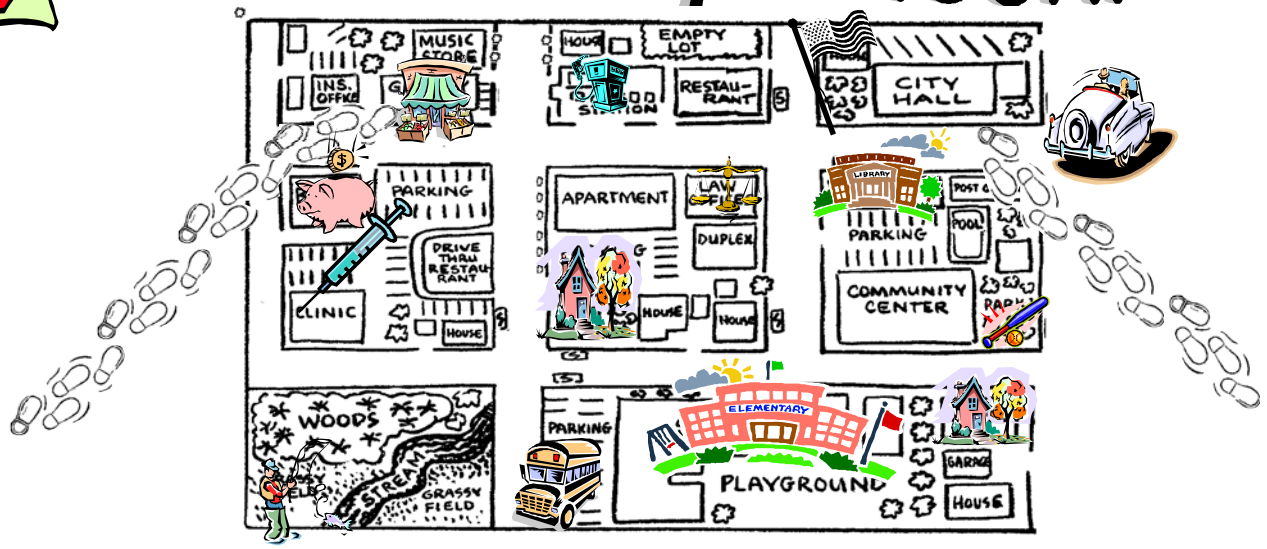
2. What are some reasons to plant native trees on school grounds?

3. How could your school use IPM to manage pests on school grounds?

4. How could your school apply the principals of Xeriscaping™ to conserve water?

5. If paper were efficiently recycled and the need for cutting trees were reduced, how would this affect forest landowners in your area?

Community Checklist



In order to answer these questions, you will need to ask the people in your community who are responsible for trees and forests in public spaces. These people may include city council members, park maintenance staff, County Extension Agent, urban forester, or public utility staff - whoever is knowledgeable about your community's forests.

1. Does your community have designated and protected parks and greenways?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

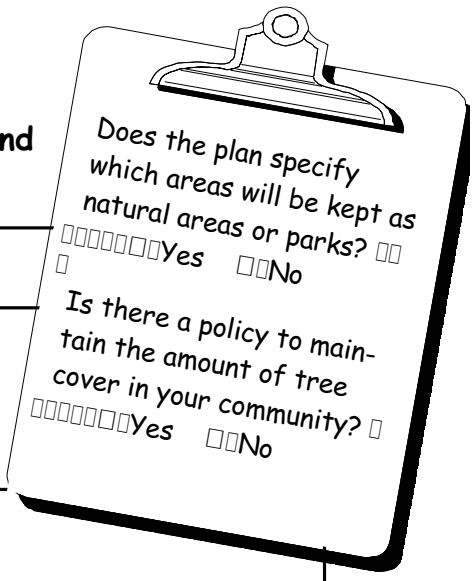
Can you name the parks and greenways in your community?

□

□□□□□Yes □□No

Greenways are natural land corridors managed for conservation and/or recreation. Greenways link forests, parks, and cultural and historic sites with each other, and in some cases, with urban centers. Greenways not only protect environmentally sensitive lands and wildlife, but also provide people with access to outdoor recreation.

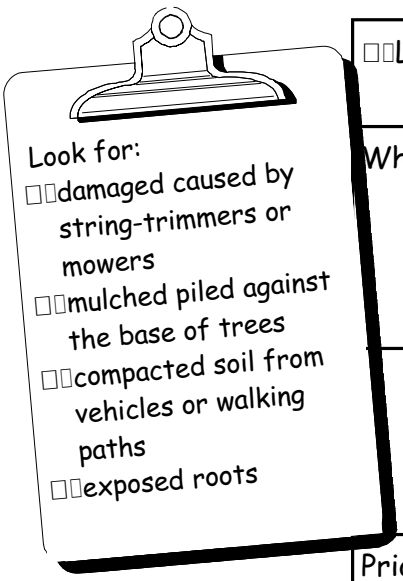
2. Does your community have a land-use plan to protect and maintain the urban or community forest?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

A community tree ordinance is a law that regulates the establishment and management of trees on public land, as well as the protection, preservation, and management of trees on private land. The purpose of a community tree ordinance is to assign responsibility for maintenance, to set management standards, and to define nuisance conditions of trees. Some communities have policies for tree removal and guidelines for replanting.

3. Is there evidence of tree damage in greenspaces and parks caused by cars, lawn maintenance practices, or the public?



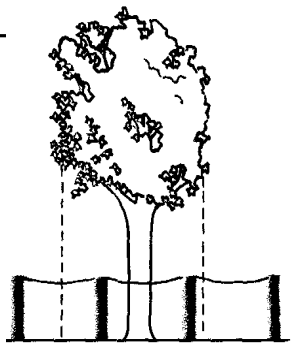
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

4. Is there a zoning law or ordinance to protect trees during development?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority - □□Very Important □□Kind of Important □□ Not Very Important	

Are trees protected at construction sites with—
□□fencing around the tree's drip line
□□fencing around groups of trees
□□designated areas away from tree roots for parking and storing heavy equipment

Damage caused by soil compaction, fill, trenching, and trunk wounding can be avoided by planning and site preparation. Properly fencing off the area under the tree's drip line before construction begins can save the tree.



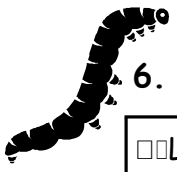
The number one killer of trees in the urban forest is construction.

5. Are <u>fertilizers</u> used only when needed?

□□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Are soil <u>nutrient</u> and <u>*pH*</u> levels tested to determine if there is a need for fertilizer?
□□Yes □□No

Are grass clippings and leaves left on the ground to decompose, used as a mulch, or composted?
□□Yes □□No



6. Are <u>pesticides</u> used only when needed?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Are landscape plants routinely checked for pests?
□□Yes □□No

Are pests identified before applying chemicals?
□□□□□□□□Yes □□No

Are products with the least harmful impacts on the environment used?
□□□□□□□□Yes □□No

Are IPM strategies used to control pests?
□□□□□□□□Yes □□No

Integrated pest management (IPM) is a pest control strategy which focuses on preventing or suppressing pest populations before they get out of control. Selecting pest-resistant plants, identifying pests before applying chemicals, treating only the affected areas, and keeping records of pest problems are all practices that help prevent pest problems.

7. Is your community protected from wildfire?

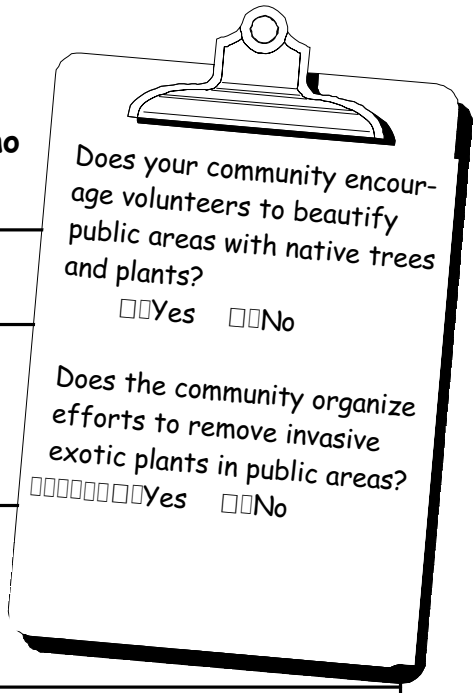
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Do new housing developments minimize the threat of wildfire by maintaining a defensible space?
□□Yes □□No

Are natural areas managed with prescribed fire?
□□□□□□□□Yes □□No

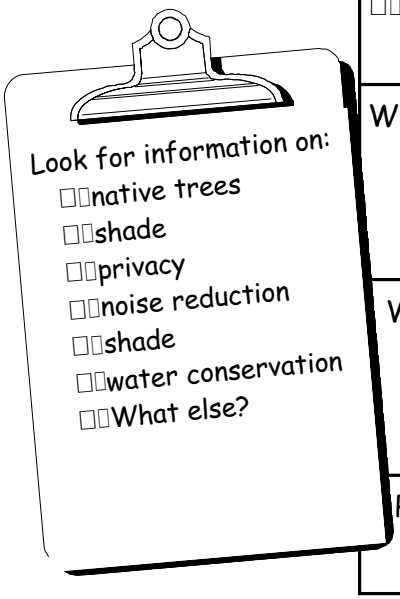
You can create a defensible space by providing a 30-foot area around your home or housing development for fire trucks to maneuver.

8. Does the community have a group of volunteers who help plant, manage, and care for urban trees?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□□Very Important □□Kind of Important □□ Not Very Important	

9. Does the community educate citizens about the importance and benefits of the urban forest?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Trees help cool the 'heat island' effect of inner cities. The heat absorbed in the concrete, steel, and asphalt of city streets and buildings makes them 3 ° to 10 ° F warmer than the surrounding countryside. The collective effect of trees in the urban forest helps lower the temperature through shade and increased humidity.

10. Does the community support recycling?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Does your community:
□□□□sell recycled paper products
□□□□recycle building materials
□□□□have curbside recycling□
□□□□collect yard waste for mulch or composting

In 2000, the U.S. Environmental Protection Agency estimated that Americans threw away 222 million tons of solid waste. Paper and paperboard accounted for nearly one-third (32%) of the waste stream. Yard wastes (grass clippings, tree trimmings, and leaves) are the second largest component at 13.7%.

11. Does your community publicly recognize the importance of trees?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Does your community celebrate:
□□□□Arbor Day
□□□□Earth Day
□□□□Any other? □□□□
□Is your city or town a "Tree City USA"
□□□Yes □□No □

12. Your question: _____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

13. Your question: _____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Make the connection – The questions below will help you reflect on, or think about the information you collected in this checklist. Use the information you gathered to answer the questions on your own, then discuss your answers with your group. Did they reach the same conclusions? Do you need more information to answer the questions?

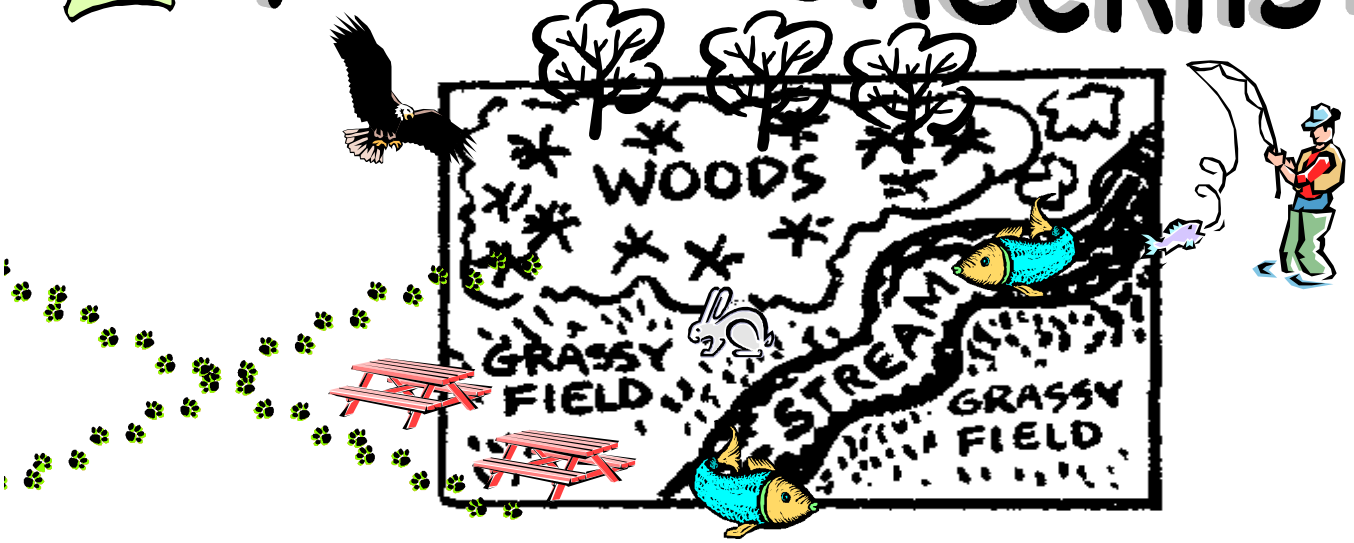
1. How does your community inform citizens about tree ordinances or policies? How might you go about educating residents about tree laws?

2. If you were a city planner, why would you choose to plant native trees? What about non-native trees? Why?

3. What kind of award or recognition might encourage community businesses to plant more trees?

4. Do you think the public supports the use of prescribed fire? What are the benefits of using prescribed fire?

Forest Checklist



In order to answer these questions, you will need to ask the people responsible for the trees and forests on public and private forest lands. These people may include forest landowners, foresters, rangers, and parks staff - whoever is responsible for the management of the forest.

1. Is there a written forest management plan?

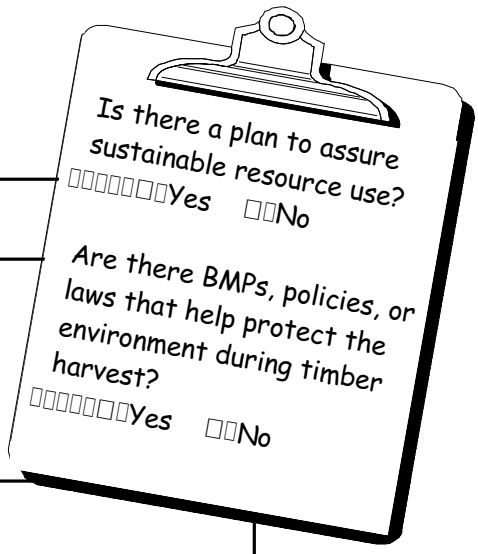
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Are there short and long-term management objectives?
□□□□□□□Yes □□No

Does the management plan reflect multiple uses for the forest?
□□□□□□□Yes □□No

A natural resource can be managed and used in such a way that it meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Managed properly, forests can provide wood and paper products for the present generation without depleting future supplies.

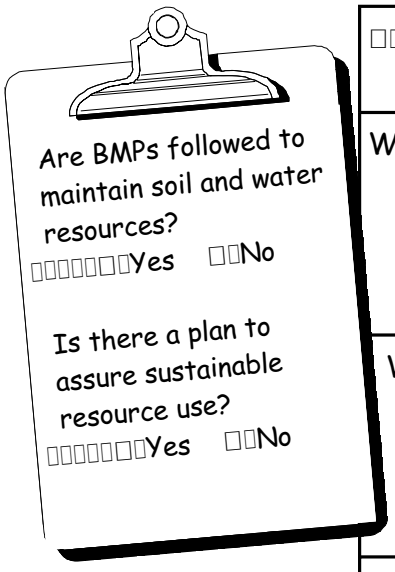
2. Is the forest managed for timber production?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Best management practices or BMPs are a set of recommended practices to ensure the protection and maintenance of water quality and wildlife habitat during forest activities. BMPs represent a balance between natural resource protection and natural resource use.

3. Is the forest managed for non-timber uses like grazing or mining?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

4. Is the forest managed for non-timber products like berries, maple syrup, or mushrooms?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority - □□Very Important □□Kind of Important □□ Not Very Important	

Are there guidelines for harvesters that outline harvesting practices?
□□□□□□□Yes □□No

Are harvested populations monitored?
□□□□□□□Yes □□No

5. Is the forest managed for recreation and/or <u>aesthetics</u>?

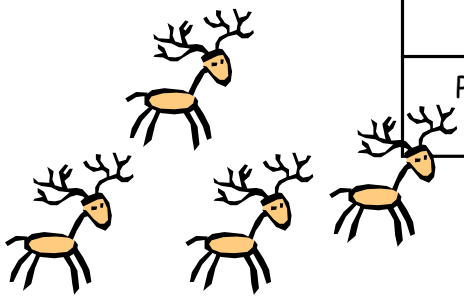
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Look for:
- □□ campgrounds
- □□ historic and cultural artifacts
- □□ erosion control measures
- □□ boardwalks for protecting habitats
- □□ separate trails for hiking and biking
- □□□trails for the disabled
- □□□scenic overlooks

Look for:
- □□ youth/adult educational programs
- □□educational materials like signs and fact sheets
- □□ interpretive trails
- □□ guided tours

6. Is educational information available in the forest?

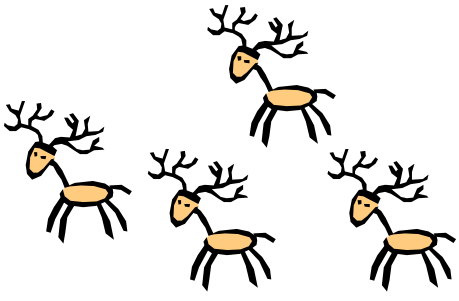
□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority - □□Very Important □□Kind of Important □□ Not Very Important	



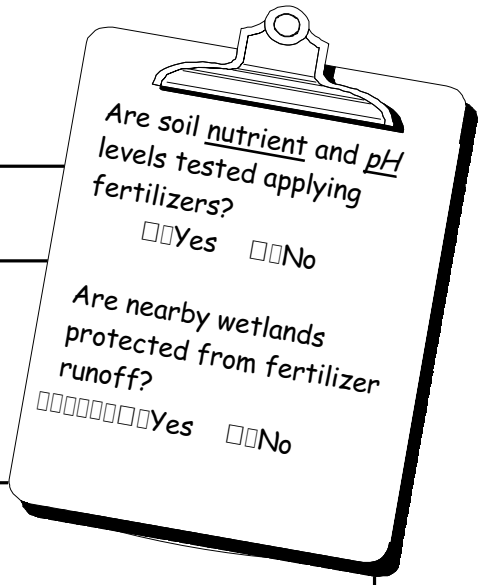
7. Is the forest managed for wildlife, including game and non-game species?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority - □□Very Important □□Kind of Important □□ Not Very Important	

Look for:
- □□□□□ nest boxes□
- □□□□□ brush piles□
- □□□□□ native plants
- □□□□□ food plots



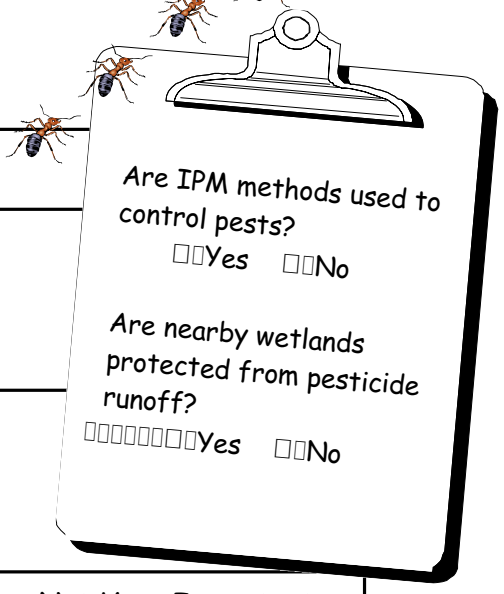
8. Are managed areas <u>fertilized</u>?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Integrated pest management (IPM) is a pest control strategy which focuses on preventing or suppressing pest populations before they get out of control. Selecting pest-resistant plants, identifying pests before applying chemicals, treating only the affected areas, and keeping records of pest problems are all practices homeowners can do to prevent pest problems.

9. Are <u>pesticides</u> used only when needed?



□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

10. Does the forest have a problem with <u>invasive</u>, <u>exotic</u> plants or animals?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Is there a management plan to remove invasive plants and animals?
□□□□□□□Yes □□No

Is the information available for visitors to halt the spread of these species?
□□□□□□□Yes □□No

Are populations of invasive exotics monitored?
□□□□□□□Yes □□No

While many exotic plants are harmless, others pose serious threats to biodiversity. Exotics can spread, out-compete, and displace native plant communities.

11. Is prescribed fire used to maintain forest health?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Is the public alerted during times of high fire danger?
□□□□□□□Yes □□No

Has the forest burned in the last five years?
□□□□□□□Yes □□No

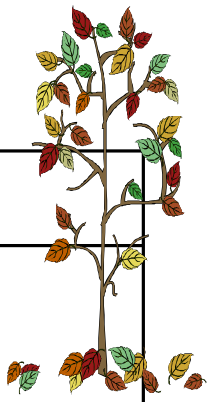
Prescribed fires are intentionally set to achieve forest management objectives. These objectives might include restoring the ecosystem, enhancing wildlife habitat, reducing the competition from young saplings, reducing the amount of leaf litter or fuel accumulated on the forest floor, or suppressing an insect infestation.

12. Are there other elements that contribute to or reduce the health of the forest?

Is there evidence of:
□□□ insect infestations
□□□ air pollution□
□□□ acid rain
□□□ hurricane
□□□ flood□□
□□□ _____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

13. Are forest festivals and celebrations held to publicly recognize the importance of trees?



Are celebrations held on:
□□□ Arbor Day
□□□ Earth Day□
□□□ Forest Products Week
□□□ National Wildlife Week
□□□ Any others?

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

14. Your question: _____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

15. Your question: _____

□□Looking Good!	□□We need more information.
What we found out -	
We need more information about -	
Priority -□□□□□□Very Important □□Kind of Important □□ Not Very Important	

Make the connection – The questions below will help you reflect on, or think about the information you collected in this checklist. Use the information you gathered to answer the questions on your own, then discuss your answers with your group. Did they reach the same conclusions? Do you need more information to answer the questions?

1. If your forest is managed for timber, where do the logs go after they have been harvested? What products are made from the timber?

2. How could you find out what the public thinks about forest management practices?

3. Think about the last time you visited a forest or park. Do you think that there is a management plan for that area? What might it entail?