



If all of the different things in nature... were each to report through its spirit to a council of wise judges what it had done to help mankind onward in the course of civilization, it is quite possible that the reward for greatest service would be given to the trees.

—Girl Scout Handbook, 1920

Trees

Grab your naturalist hat and get ready to get to know trees—from the shade to the science, the fruit to the forest, and the legends to the lumber. To know trees is to love them!

Steps

1. Try some tree fun
2. Dig into the amazing science of trees
3. Make a creative project starring trees
4. Explore the connection between people and trees
5. Help trees thrive

Purpose

When I've earned this badge, I'll have gone to the root of what trees are all about—and branched out as a naturalist.

Every step has three choices. Do ONE choice to complete each step. Inspired? Do more!

STEP 1 Try some tree fun

What better way to get glad about trees than to spend some time with them? Head outside and enjoy the bounty, shade, and delicious fun of trees.

CHOICES - DO ONE:

- Take a tree trip.** Visit a sugarhouse to learn how maples are tapped for maple syrup, or pick apples, oranges, almonds, or other fruits at an orchard. You might even know trees in your neighborhood with something tasty to offer. Bring home a souvenir—your homemade syrup or a bushel of apples for pie.

OR

- Design a tree house.** Check out the basics of architectural drawing and draft the plans for your dream tree house. Then present your plans to friends to see if they'd like living there—or show an architect to see if your design would work.

FOR MORE FUN: Have a contest for the most original tree house design.

OR

- Cook a tree dish.** How about baking a lemon meringue pie, pressing almonds for milk, using several kinds of olives on pasta, mixing cherry preserves, or creating your own guacamole recipe? Share your dish (at a shady picnic?) and point out which ingredients came from trees!

FOR MORE FUN: Name five trees in this country that produce edible nuts.



- ## Careers to Explore
- Landscape architect
 - Tree biologist
 - Park conservationist
 - Forest ranger
 - Lumberjack
 - Tree trimmer
 - Woodworker
 - Arborist
 - Holiday tree farmer
 - Orchard manager
 - Reforestation engineer
 - Soil scientist
 - Water quality engineer
 - Paper maker
 - Tree surgeon
 - Nature writer
 - Maple syrup producer

STEP 2 Dig into the amazing science of trees

You've got a good idea of what fun trees can be, so take a closer look at just how trees grow. Find out how trees serve the earth, and the plants and animals in their ecosystems—and create a tree souvenir that showcases just how much you know about the science behind the fun.

CHOICES – DO ONE:

- Be a naturalist in your neighborhood.** Take a walk through your neighborhood and identify at least five different types of trees. Then make a “tree map” with each kind of tree and where it's located. How did those trees get there? Were they natural or planted? Native or imported? Include notes in your map for a cool tree reference.

FOR MORE FUN: Add photographs—what about pictures of your trees through the seasons?

OR

- Sketch and label the parts of a tree.** Choose your favorite kind of tree and make an annotated sketch that shows layers and levels, from top leaves to bottom roots. Include how three kinds of plants or animals use your tree—perhaps for food, fuel, camouflage, medicine, or shade?

FOR MORE FUN: With your Cadette friends, choose part of a tree to be, such as the roots, bark, or trunk. Together, act out how your different parts work together to keep a tree healthy in the sun and rain.

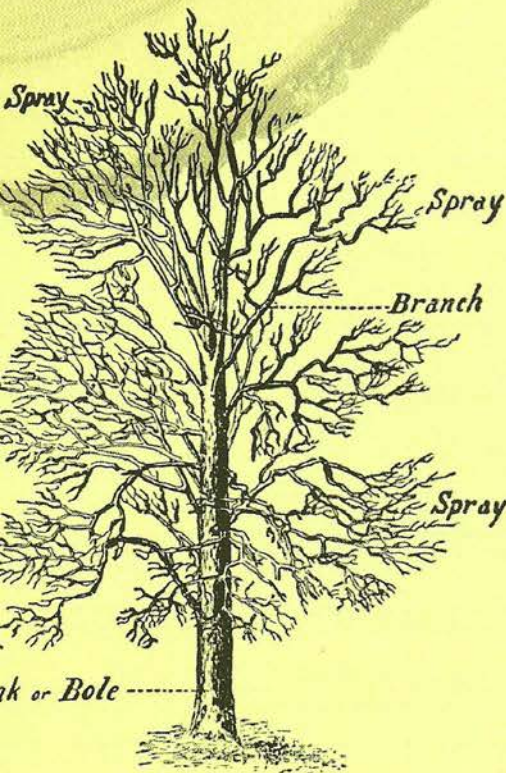
OR

- Delve into the forest life cycle.** Fires destroy—but they also create. (Some pines rely on fires to open their cones.) Find out what role fires play in a healthy forest. Talk to a ranger or other fire expert about the techniques they use to manage forests—before, during, and after fires occur.

FOR MORE FUN: Visit a fire tower to get a panoramic view of a forest.

Dendrochronology

(tree-ring dating) counts the annual growth rings on long-lived trees and compares these “master” ring patterns with pieces of wood found at archaeological sites. It is the oldest form of dating, used mostly on wooden objects.



THE PARTS OF A TREE*

More to Explore

Pretend that you're a Girl Scout in 1963. Try this activity girls did to earn their Trailblazer interest patch: With the cooperation of your council, make a survey of one campsite. Learn the history or “land legend” of the site: What was the land like originally? What kinds of trees and plants grew there? What can be done to restore the land, attract birds and animals, and preserve water life?



STEP

3 Make a creative project starring trees

Trees have long inspired people to create. Here's your chance to turn your growing knowledge of trees into art.

CHOICES - DO ONE:

- Get tree crafty.** Try your hand at leaf or bark jewelry; sculpture with acorns, pinecones, or recycled wood; a pressed-leaves book or a waxed-paper sheet collage book cover; leaf coasters; or a carved or decorated walking stick. Share your project with family, friends, and Girl Scout sisters—or make it a gift!

OR

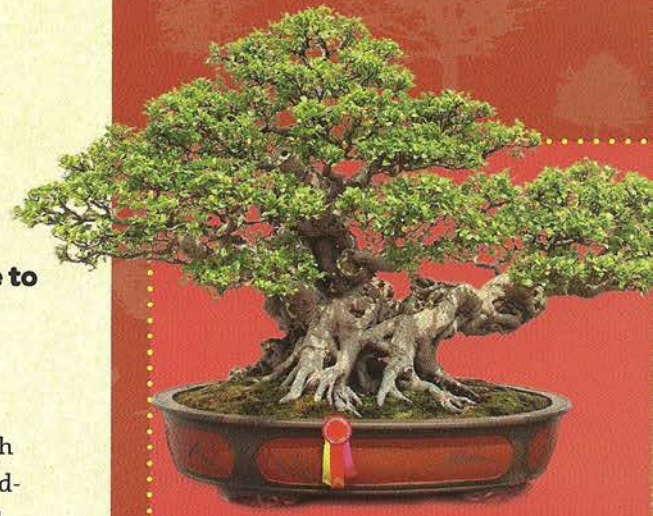
- Capture a tree on your canvas or the page.** Paint, draw, sketch, photograph, or sculpt a leaf, tree, tree flower, forest, or tree landscape. If you're more of a poet or singer, find three poems or learn three songs about trees, and then write your own poem or song.

FOR MORE **FUN**: Organize a tree talent show with your friends and Girl Scout sisters.

OR

- Create your own tree legend.** There's a rich history of tree mythology in Celtic and Norse traditions, Native American culture, and even in ancient Greece. Find three fascinating stories, and then write your own legend to share.

FOR MORE **FUN**: Turn your story into a short film or make it a bedtime story.



The Japanese Art of Bonsai

Bonsai are tree sculptures. Bonsai are not miniature varieties or dwarf trees, they are purposely kept small and contained in pots. Both the root ball and tree limbs are pruned and shaped. The trees are said to bring together shin-zen-bi, or truth, essence, and beauty. The most famous bonsai artist, Masahiko Kimura (or "the magician"), wanted to be a rock star. But his mother asked him to apprentice with a bonsai artist at age 15, and he has since become the undisputed rock star of bonsai.

“I frequently tramped eight or ten miles through the deepest snow to keep an appointment with a beech-tree, or a yellow birch, or an old acquaintance among the pines.”

—Henry David Thoreau,
author

STEP **4** Explore the connection between people and trees

Food, inspiration, and oxygen aren't the only ways trees benefit people. Fuel, medicine, and shelter are also crucial to the tree-people connection—crucial, and anything but simple. Naturalists know all the moving parts surrounding their subject, so here's where you get the whole context of the tree relationship.

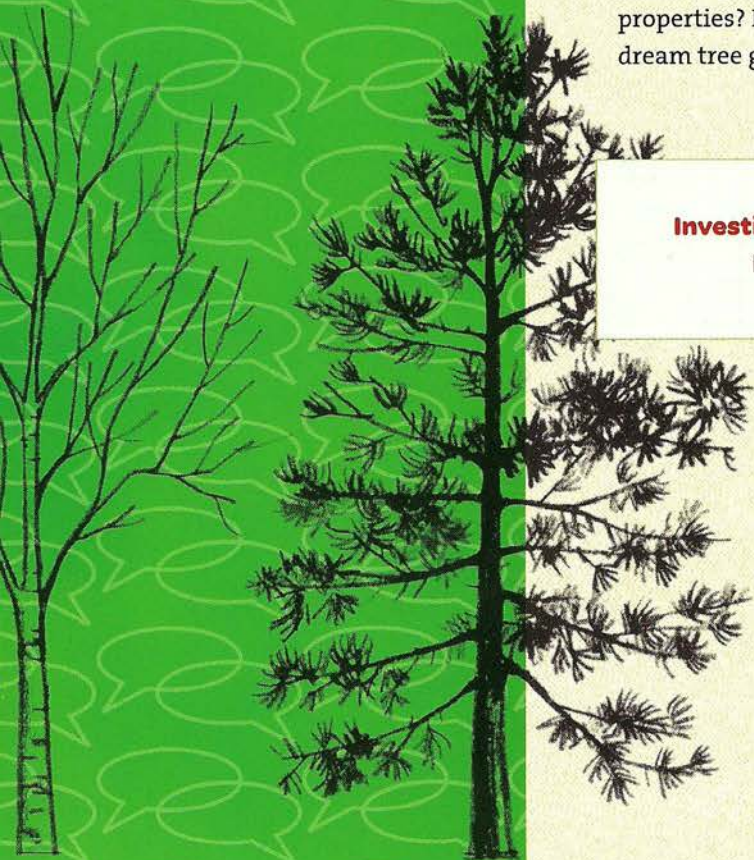
CHOICES – DO ONE:

- Debate logging, clear-cutting, and deforestation.** People cut down trees for a variety of reasons—think lumber, paper, and grazing land. There are pros and cons for both trees and humans here. What are they? Research each side so you understand the issues and then try arguing both sides—with a friend, fellow Girl Scout, or even a teacher or logging expert.
OR
- Chart how wood travels.** First, visit a lumberyard to find out what kind of lumber is used to build houses in your community and why. How does your community use soft woods, hard woods, and exotic woods? Then, make a map or chart that shows the path from the forest to your local lumberyard.
OR
- Create a dream tree garden.** Talk to a local landscape architect or community arborist about the kinds of trees that are popular for gardens, yards, or parks where you live. Why are they popular? What are their properties? Now use this information to draft an architectural plan for a dream tree garden that would thrive in your area.

More to Explore

Investigate what happens to used wood in your community.

If a house is demolished or a felled tree is turned into wood chips, where does the old wood go?



STEP 5 Help trees thrive

Use your tree savvy to get involved in the tree action in your community.

CHOICES - DO ONE:

- Plant a tree.** It could be in your yard, at your school, in a park, at a nearby Girl Scout camp or locale, or an area in your community that you identify as tree-needy. Choose a kind of tree that matches the need! Then tend the tree for at least one month. How often does it need to be watered? Does the tender bark need protection from animals or weather?

FOR MORE FUN: Grow the tree from seed or sapling.

OR

- Tend to a tree somewhere in your community.** Could a neighbor or family member, school, nursery, park, or other community area use your help? Find out what the trees around you need and then offer to take care of a tree for one month. You might rake leaves, help prevent insect damage, trim branches, or prep trees for harsh weather.

OR

- Shadow one of the tree caretakers in your community.** Follow an arborist on a visit with a customer. Learn what's involved in caring for the big trees in your area—from clearing branches after a storm, protecting trees from insect invasions, to how to trim huge branches, and what happens if a major tree is diseased.

More to Explore

Many communities are struggling with serious insect diseases that can take out entire forests. Learn which bugs are bugging the trees in your area, and find a way to help.

Why not let everyone plant at least one tree? Never mind what kind of tree... Your trees will be a legacy to posterity from the Girl Scouts to their country.

—How Girls Can Help Their Country, 1913