

Virtual Program – Outdoors

Week 6



Trees

Cadette (6th, 7th, & 8th Grade)

Girl Scouts have a legacy of being naturalists – people who learn about, take care of, and educate others about nature. Trees are essential to life on earth and a topic that you can never stop learning enough about (there are endless *branching* subjects to explore)!

“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 the greatest service would be given to trees.” – Girl Scout Handbook, 1920

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

Complete the following activities to meet the requirements for all five (5) steps; some activities cover multiple steps.

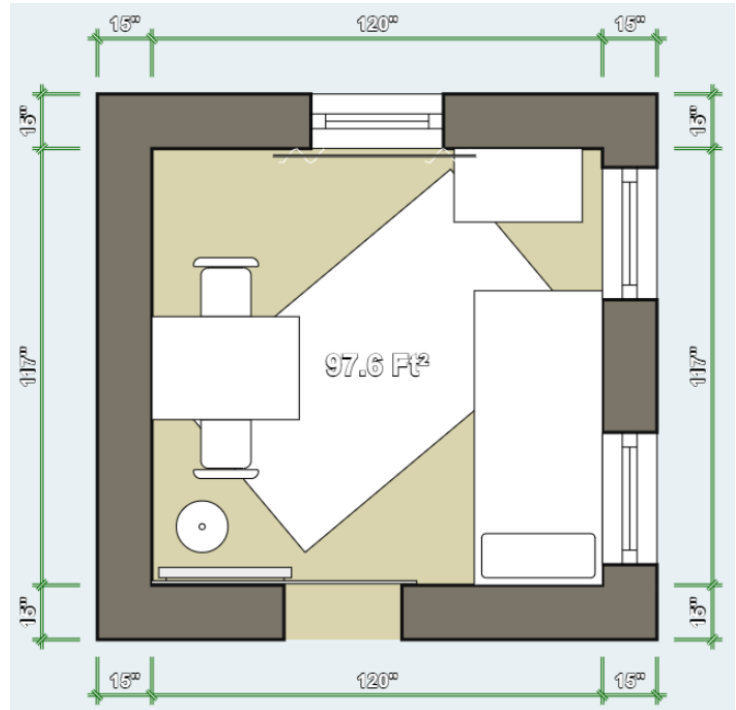
- Design a Tree House
- Explore the Tree Finder Badge from the 1930's and complete at least four (4) of the steps
- Learn how fires help forests
- Learn about two trees that are native to your area (state, region) and create an art piece around them
- Explore jobs related to trees and do an activity around one
- Repurpose old wood
- Take a hike!
- Give Back: Research the 1963 Trailblazer Interest Patch and plan a project for Rancho, Barker, or the Council office building in Albuquerque!

Designing a Tree House

Using paper and pencil, graph paper, or an online app/program design the inside and outside of your tree house. What are you going to include? An elevator? A library? A fireplace? The options are endless!

Submit your treehouse design to customer care@nmgirlscouts.org for a chance to win a patch. Make sure to include in the subject line "Cadette Tree Badge Contest ATT: Charli".

Here are some examples:



1930's Tree Finder Badge Requirements

It's no secret that Girl Scout badges used to require much more study and time investment. They were more like teaching yourself a high school or college level class instead of dipping your toes into a subject. This was ideal for people who wanted to study and become really knowledgeable in those areas but is less applicable to our way of life now where we want to get a taste of a subject before committing ourselves to it.

Review the steps for the Tree Finder Badge (1927 – 1938) below and pick four to complete. We've linked some helpful websites to aid you in your investigation.

1. Know the parts of a tree
 - a. <https://www.kidzone.ws/plants/trees.htm>
 - b. <https://www.fs.usda.gov/learn/trees/anatomy-of-tree>
2. Know 25 trees and shrubs when in leaf
 - a. <https://www.npsnm.org/wp-content/uploads/2016/10/Trees.pdf>
 - b. <http://osunanursery.com/new-mexico-friendly-trees/>
3. Know at least 10 of these by bud, leaf scars, and bark
4. Know something of the life history and life processes of trees
 - a. <https://www.sciencelearn.org.nz/resources/2636-what-is-a-tree>
 - b. https://en.wikipedia.org/wiki/Tree#Superlative_trees (for more information don't forget to check out the resources at the bottom of Wikipedia pages!)
 - c. <https://www.youtube.com/watch?v=ovSPovvZiKg>
5. Be able to read the age of a tree by its rings, recent growth by its twigs
 - a. <https://climatekids.nasa.gov/tree-rings/>
 - b. <https://scied.ucar.edu/tree-rings>
6. Plant at least one tree that you have raised from seed
7. Demonstrate how trees should be pruned, trimmed, and breaks mended
 - a. <https://www.youtube.com/watch?v=IQhmIK-0HOc>
 - b. <https://extension.umn.edu/planting-and-growing-guides/pruning-trees-and-shrubs>
8. Know how trees are to be protected from insect and fungus diseases
9. Make a list of woods and their uses
 - a. <https://builderology.com/types-of-wood/>
 - b. <https://www.youtube.com/watch?v=bvSe6r5BpaY>
 - c. (and for fun) <https://www.wizardingworld.com/writing-by-jk-rowling/wand-woods>
10. Know the best trees to plant in the streets, small gardens, and about (around) the school

Forest Fires are Good?

Forest fires are both extremely damaging and completely necessary to a healthy forests. Many state and governmental agencies even perform “controlled burns” to help forests that have not had a wildfire within a certain period. These agencies also do a good job of informing the public about why burns are valuable, when they're happening, and keeping the local communities apprised of the status of the burns. It can be scary to see the smoke but we know we're in good hands.

Foresters and Rangers evaluate the need for controlled burns based on the current fire risk, time since last burn (wild or controlled), ground cover, and expected future use. For example: forests and grasslands that have not had a fire in a long time and are expecting both high traffic and a high fire danger later in the year should have a controlled burn to minimize the risk of an uncontrollable wildfire at a later time.

Benefits of wildfires and/or controlled burns:

- ✓ Clear dead ground cover to make room for new growth
- ✓ Add nutrients from burned plants to the soil
- ✓ Get rid of smaller areas of dead plants/trees to prevent serious or uncontrollable larger fires

Learn more and test your knowledge by completing Smokey's Wildfire Prevention Detective Training.

And remember: improperly extinguished campfires are **the** biggest cause of accidental wildfires in New Mexico so practice safe campfires and make sure they're DEAD OUT before you leave your campsite.

Art Inspired By Trees

If you haven't already, research trees that are native to your state/city/community/region. Pick **two**. Next, create a piece of art that centers on those two specific trees. Your art can take any form!

Here are some suggestions to get your brains moving:

- Photography
- Drawing
- Painting
- Collage
- Leaf Rubbings
- Clay sculpting
- Crochet or Knit
- Digital Art
- Short Story
- Poem
- Myth/Legend

Examples:



Careers Centered Around Trees

Are you a nature enthusiast? Working outside and in nature helps benefit all people because you're taking care of our planet and community! Here are several (but not all) careers relating to trees and the outdoors:

1. Arborist
2. Soil Scientist
3. Landscape Architect
4. Forester
5. Orchard Manager
6. Environmental Grant Writer
7. Christmas Tree Farmer
8. Conservation Scientist
9. Park Ranger
10. Lumberjack

Activity: pick **one** and do a little research. What does someone do in this job? What might their average day look like? Do you need a degree or just experience? THEN! Craft a "Day in the Life" journal; do this by writing out a journal page (or several) as if you were a person with this career. What did you do? How did it make you feel? What are your goals for future days?

Feeling a little extra? Turn your day in the life journaling exercise into an animated or stop motion film and share with family, troop, or GSNMT by emailing it to customercare@nmgirlscouts.org. You can also do this piece as a group with your sister Girl Scouts.

Repurpose Old Wood

While wood can decompose and recycle on its own, it may be more practical to *repurpose* old wood instead of trashing it. This keeps the wood (which may be treated with chemicals or full of nails) out of landfills. You can even make a business out of recycling and repurposing furniture and reselling it!

Check out the videos below for inspiration or instructions.

You can repurpose wood in your community in many different ways.

1. Turn pallets into furniture
 - a. https://www.youtube.com/watch?v=MkjZE7VXc_M
2. Turn pallets into planters
 - a. <https://www.youtube.com/watch?v=Cno26AsG1iA>
3. Give old furniture a new purpose (turn a set of dresser drawers into a dog bed!)
 - a. <https://www.youtube.com/watch?v=FqGRtvg9o-k>
4. Make a tray or dry erase board out of a picture frame
 - a. (this tutorial uses all new materials but imagine that they're all repurposed materials instead ☺)
<https://www.youtube.com/watch?v=FJ84EPgOUK4>
5. An art piece!
 - a. <https://www.youtube.com/watch?v=Oj8BjJp1HG4>
6. Other inspirational videos
 - a. <https://www.youtube.com/watch?v=lyWIBRIHill>
 - b. <https://www.youtube.com/watch?v=ReS5wLa0WH0>
 - c. <https://www.youtube.com/watch?v=4LV4hdMNYsA>
 - d. <https://www.bobvila.com/slideshow/15-surprisingly-simple-woodworking-projects-for-beginners-46626#how-to-make-a-vintage-wooden-crate>

Repurposing pallets usually requires you to sand them down. Always work with a skilled older girl or adult when using power tools. Check online and see if there is a woodworking or community workshop that offers classes for learning how to use power tools! We suggest that you still work with someone else when using power tools for safety. And don't forget your safety equipment: goggles, a mask, and gloves!

Take a hike!

Now it's time to get active. Put on your walking shoes and head to a park, open space, forest, or just plan on going around the block.

Take your camera or a journal with you and record the different kinds of trees that you see. How many can you identify? If the hike is the first step that you're doing, how can you use what you experienced to influence your other projects for this badge?

Find an appropriate quote (or make one up) and share it along with your photo or drawing on social media to inspire others!

Trailblazer Interest Patch

With the cooperation of your council, make a survey of one property (with trees). Learn the history or "land legend" of the site: what was the land originally like? What kinds of trees and plants grew there? What can be done to restore the land, attract birds, and animals, and preserve water life?

Don't forget to connect with us on social media!

---> Insta: @nmgirlscouts

---> Facebook: facebook.com/nmgirlscouts

---> Twitter: @nmgirlscouts

---> Website www.nmgirlscouts.org

Additional Resources:

- <https://science.howstuffworks.com/environmental/green-science/how-forest-fire-benefit-living-things-2.htm>
- <https://www.worldwildlife.org/stories/forest-fires-the-good-and-the-bad>
- <https://smokeybear.com/en>
- <https://floorplancreator.net/plan/demo>