

## CADETTE TREES BADGE – MEETING 2

**Badge Purpose:** When you’ve earned this badge, you’ll have gone to the root of what trees are all about—and branched out as a naturalist.

**Activity Plan Length:** 1.5 hours

| Time       | Activity   | Materials Needed  |
|------------|--|---|
| 10 minutes | Getting Started <ul style="list-style-type: none"> <li>Girls recite the Girl Scout Promise + Law</li> </ul>                                | <input type="checkbox"/> (Optional) Girl Scout Promise and Law poster   |
| 20 minutes | Birch Bark Art <ul style="list-style-type: none"> <li>Watch a Native artist create birch bark art, then create art of your own.</li> </ul> | <input type="checkbox"/> Phone or computer with internet access<br><input type="checkbox"/> Carbon paper<br><input type="checkbox"/> White printer paper<br><input type="checkbox"/> Scissors |
| 15 minutes | Snack Chat <ul style="list-style-type: none"> <li>Enjoy a healthy “tree” snack and chat about some amazing tree facts.</li> </ul>          | <input type="checkbox"/> Healthy snacks   |
| 35 minutes | I Speak for the Trees <ul style="list-style-type: none"> <li>Plant a tree to ensure healthy forests for future generations.</li> </ul>     | <input type="checkbox"/> Phone or computer with internet access   |
| 10 minutes | Wrapping Up  | <input type="checkbox"/> (Optional) Make New Friends lyrics poster  |

### Getting Started

Time: 10 minutes

Materials Needed: (Optional) Girl Scout Promise and Law poster

Welcome everyone to the meeting, recite the Girl Scout Promise and Law.

### Activity #1: Birch Bark Art

Time: 20 minutes

Badge Connection: Step 3 – Make a creative project starring trees and Step 4 – Explore the connection between people and trees

Materials Needed: Phone or computer with internet access; carbon paper; white printer paper; scissors

Prep Needed:

- Cut the carbon and printer paper into 4” x 4” squares.



1. Native Americans revered the birch tree and made great use of its bark. Because birch bark is waterproof, Native Americans used it to make canoes, tools, shelter, artwork, and more.
2. Denise Lajimodiere, from the Turtle Mountain Band of Chippewa Indians, is a birch bark biting (mazinibakajige) artist. These intricate designs are created by biting down on small pieces of folded bark.
3. Watch and listen to Denise speak more about her art and creative process:
  - [bit.ly/birchbarkbiting](http://bit.ly/birchbarkbiting)
  - [bit.ly/howtobirchbark](http://bit.ly/howtobirchbark)
4. Then, create some birch bark biting art of your own. If you can find birch bark, feel free to use that (some birch bark might have to be soaked first to soften it). If not, you can use carbon paper and regular white printer paper. *Do not take pieces of birch bark from living birch trees, only pick it up from the ground where it has fallen from the tree.*
5. Place a piece of carbon paper over the piece of printer paper (the black of the carbon paper should be touching the printer paper), then make different folds in the paper to create different designs. Bite down your design or shape, then carefully unfold the paper to see your final design. *Make sure your lips are dry before you start doing your biting!*

## Activity #2: Snack Chat

Time: 15 minutes

Badge Connection: Step 2 – Dig into the amazing science of trees

Materials Needed: Healthy snack (preferably a “tree” snack like apples, pears, or nuts)

1. We owe so much to trees. The snacks you’re enjoying now are literally the fruits of trees’ labor. As you enjoy your snack, discuss some amazing facts about trees (and share some that you might know!):
  - Only 5% of the millions of seeds dropped ever begin to grow. (And only 5% of those seeds that grow survive their first year.)
  - Trees can talk to each other. Trees in a forest communicate danger by secreting chemicals through their roots. They also release “volatile organic compounds” through the air to communicate with trees further away.
  - Trees need rest too. Scientists used infrared lights to keep track of trees’ “movement” during the nighttime. They discovered that trees’ branches and leaves sagged at night (and continued to sag through the night), and then perked back up again as the sun started to rise.
  - The part of the tree you can see is just the tip of the iceberg. The roots of some trees can grow and stretch as deep as 100 feet into the ground!

## Activity #3: I Speak for the Trees

Time: 35 minutes

Badge Connection: Step 2 – Dig into the amazing science of trees and Step 5 – Help trees thrive

Materials Needed: Phone or computer with internet access

1. Unfortunately, though trees are so critical and vital to animal life, acres and acres of forest are being cut down every second.
2. Investigate the causes of deforestation: [bit.ly/deforestationcauses](http://bit.ly/deforestationcauses)
3. Fortunately, you can help give back to ensure that future generations can enjoy the beauty and bounty of trees too.
4. Hope Jahren is a geochemist, geobiologist, and author of the memoir *Lab Girl*. She writes:
  - “Every year since 1990, we have created more than eight billion new stumps. If we continue to fell healthy trees at this rate, less than six hundred years from now, every tree on the planet will have been reduced to a stump. My job is about making sure there will be some evidence that someone



cared about the great tragedy that unfolded during our age...Here is my personal request to you: If you own any private land at all, plant one tree on it this year.”

5. Connect with your local parks department (or your local university’s extension program, like the University of Minnesota Extension) and ask them how to plant and care for a tree (and decide what type of tree will thrive best in this region).

## Wrapping Up

Time: 10 minutes

Materials Needed: (Optional) Make New Friends song lyrics poster

Close the meeting by singing Make New Friends and doing a friendship circle.

## More to Explore

- Field Trip Ideas:
  - Take a trip to the arboretum to see native and non-native species of trees.
  - Tap and make your own maple syrup! Check your local nature center, parks department, or the GSRV website to find events.
- Speaker Ideas:
  - Invite an arborist, master gardener, or nursery owner to your meeting to talk about how to care for trees.
  - Invite an artist or woodworker to your meeting to talk about how they use trees and wood in their art or craft.

