



Bowman's Hill Wildflower Preserve inspires the appreciation and use of native plants by serving as a sanctuary and an educational resource for conservation and stewardship.

Located in New Hope, Pennsylvania, the Preserve has over 4 miles of walking trails wandering through 134 acres of forest, stream valley, pond and meadow.

"Experience what's natural, learn what's native."


PO Box 685 | 1635 River Road | New Hope | PA 18938

215.862.2924

Connect with the Preserve online

www.bhwp.org |  @bowmanshillwildflowerpreserve

 @BowmansHillWildflowerPreserve  @Bowmans_Hill_WP

 bowman-s-hill-wildflower-preserve

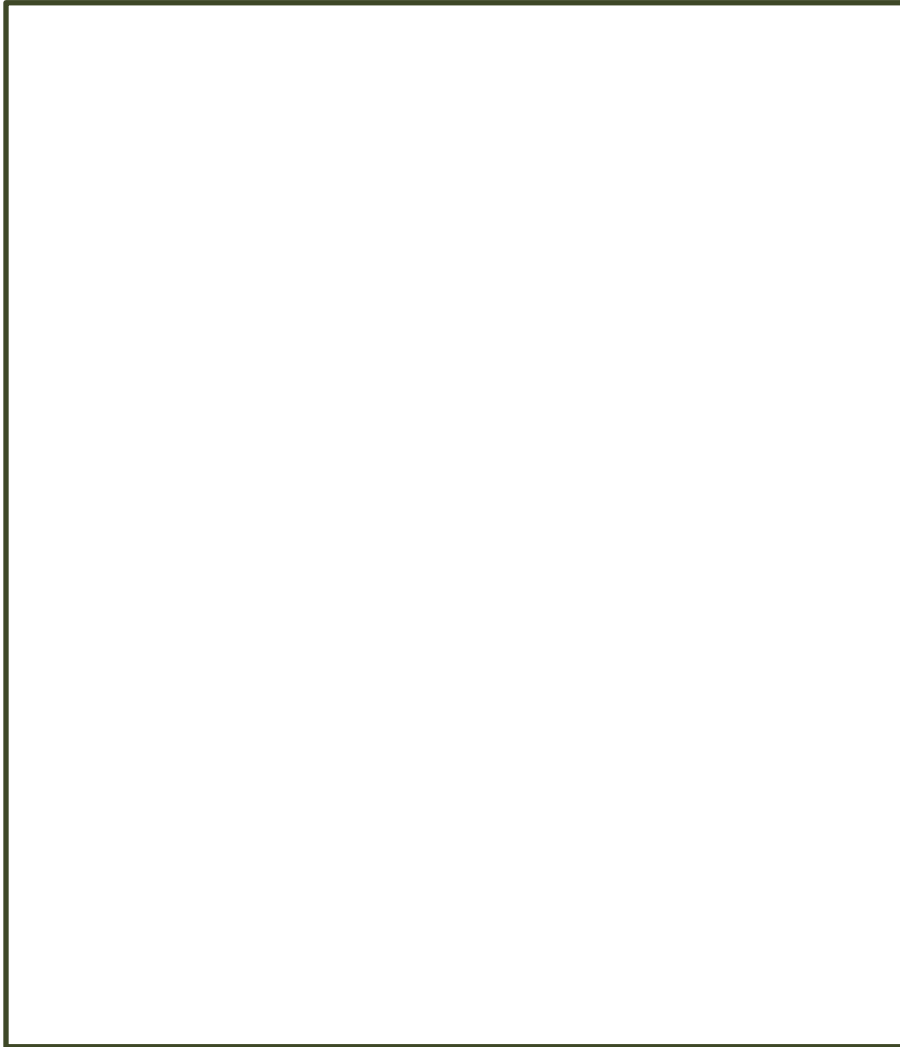
Family Activity Guide: Trees, Shrubs, and Forests



This guide is made possible by a generous grant from the
Church & Dwight Employee Giving Fund

DISCOVER THE FOREST

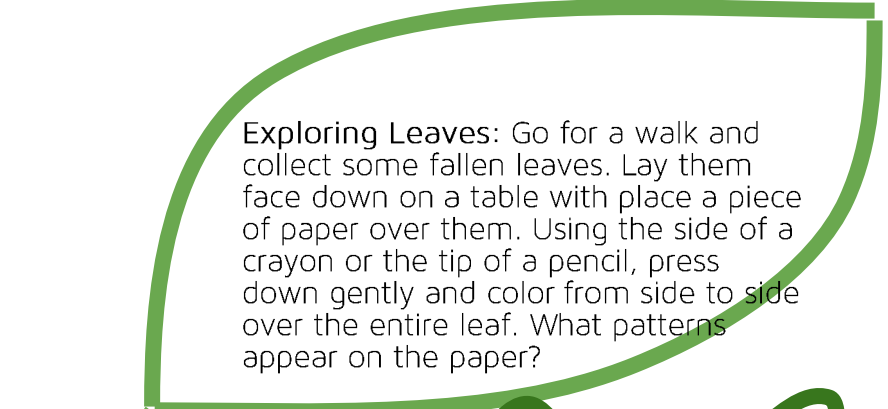
The forest has all kinds of hidden things to discover! Spend some time in the forest and see what parts make you happy, what parts make you laugh, and what parts make you want to learn more! Use this page as a field notebook and draw or write about what you find! You can use the back for extra space.



WOODLAND WONDER

Why did the leaf go to the doctor?


It was feeling green!



Exploring Leaves: Go for a walk and collect some fallen leaves. Lay them face down on a table with place a piece of paper over them. Using the side of a crayon or the tip of a pencil, press down gently and color from side to side over the entire leaf. What patterns appear on the paper?



Forest Detectives: Explore the woods with a magnifying glass! See how interesting leaves, bark, and soil are up close! Look for other exciting things too, like patches of moss or insects on the forest floor.



Woodland Artist: Collect sticks and leaves and arrange them into a picture. See what you can create with nature!

PLANT A TREE

Share your love for the forest! Songs are a great way to have fun and learn new things. The song below is based on a common tune, but we've changed the words!

(To the tune of the hokey pokey)

You put the shovel in *(digging movement!)*

You pull the shovel out

You put the shovel in

And you loosen up the ground *(wiggle around!)*

When you care about your plants *(hug yourself)*

You make the earth a green place *(draw invisible circle)*

And that's how you plant a tree! *(stretch out arms like branches)*

You pick the tree up *(pretend to pick up tree)*

You put the roots down *(pretend to move roots)*

You pick the tree up *(pretend to pick up tree)*

And you set it down *(pretend to put it down)*

When you care about your plants *(hug yourself)*

You make the earth a green place *(draw invisible circle)*

And that's how you plant a tree! *(stretch out arms like branches)*

You pack the soil in *(pat ground)*

You pack the roots in too

You pack the soil in

And you're almost through


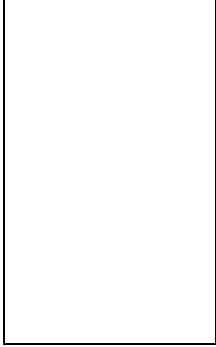

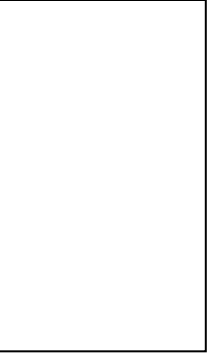



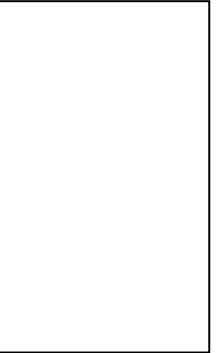
When you care about your plants *(hug yourself)*

You make the earth a green place *(draw invisible circle)*

And that's how you plant a tree! *(stretch out arms like branches)*

SCAVENGER HUNT

The best way to get to know the trees is to visit them in their home, the forest! Here are some leaf shapes you can find around the Preserve. You may even be able to find them in your own neighborhood! Walk with an adult and see if you can find some of the leaves below. Go ahead and sketch what the tree looks like in the space provided. Can you find all of these trees? Penn's Woods is a great place to look for poplars, hemlocks, maples, and oaks!

<p>Sugar Maple</p>  	<p>White Oak</p>  
<p>Eastern Hemlock</p>  	<p>Tulip Poplar</p>  

SOLVE THE MYSTERY

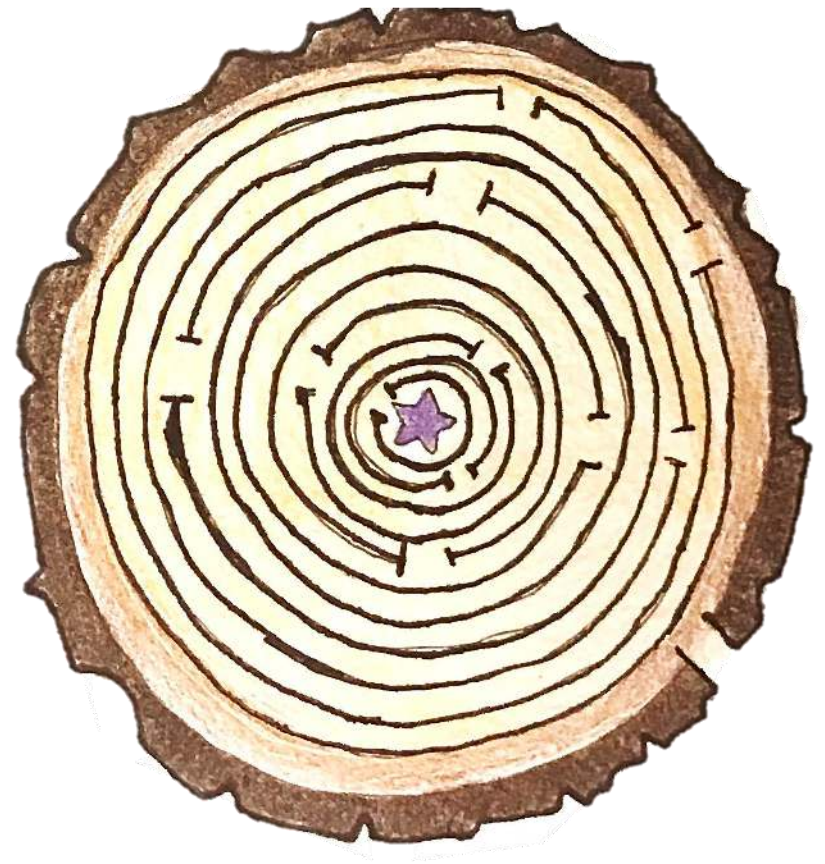
As a tree gets older, it grows taller and wider. It develops a distinct ring that shows how big it was, and how good growth conditions were at that point in its life. We can learn about the tree's life by investigating a slice of the tree, called a cookie. Any challenges a tree faces are recorded in these rings. Since these marks are preserved in the tree, scientists can use tree cross sections to learn about what happened.

Use your detective skills to learn more about the tree on the next page: If a tree grows a ring for each year it's alive, how old is this tree? Look at all the dark marks and scars. What could they mean? A fire might leave a dark scar across multiple rings. When there's a drought, the rings may get narrower for several years, and when there's ideal growth conditions (lots of space, lots of water) the rings will be wider. Can you guess the story of this tree?

TREE RING MAZE

The heartwood is located at the center of the tree trunk. It once carried nutrients through the tree, but new growth has taken on that role. Its new job is to provide support and stability as the tree grows taller.

Help our botanists navigate the tree's growth rings to find the heartwood of this tree.



EXPLORE IN THE DIRT

The forest isn't just a space full of trees, many other organisms, like mammals, birds, insects, other plants and fungi call the forest home. They all work together to make a healthy ecosystem.

Decomposers are organisms whose role is to break down dead plants and animals, including things like fallen leaves and sticks, and return their nutrients to the soil. These creatures are some of the most important in the forest, since they provide the plants with the nutrients to grow healthy and strong.

As you visit the forest, look for some of these helpful creatures! Turning over logs or picking up fallen leaves is a great way to find insects and other decomposers. Have fun exploring and remember that the forest is the home of our newly found friends. You should always try to leave a friend's house just the way you found it. After your exploration, return any leaves and logs back to where you found them as best as you can.



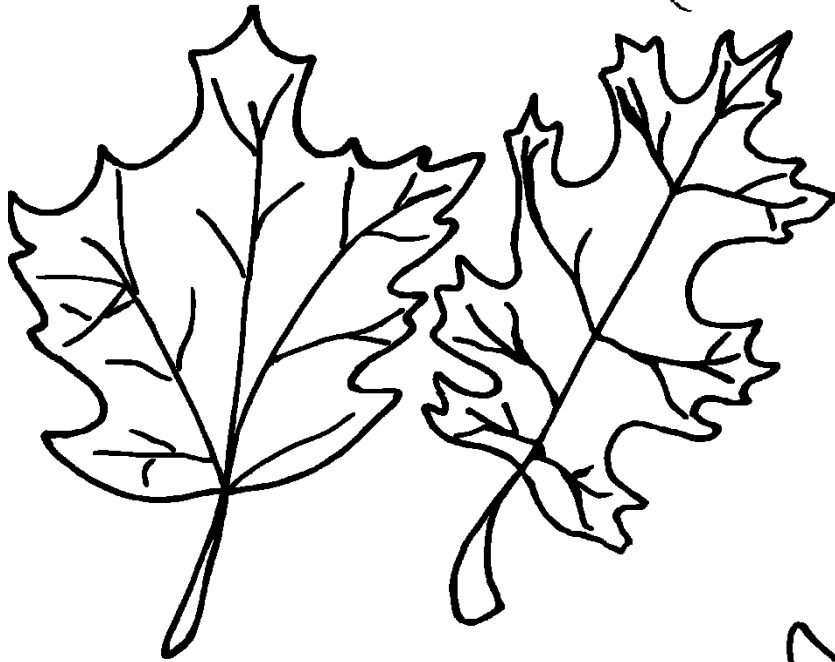
This tree is _____ years old.

Tell me the tree's story:

NATIVE TREE COLORING SHEET

The forest goes through many changes over the course of a year. One of the most dramatic changes is during the fall, when the leaves on the trees lose their green and showcase colors of yellow, orange, brown, or red. Look for some of these native trees in the forest, and as the seasons change, observe what happens to the leaves. What colors do you see? Did any of them stay the same? Use your observations as inspiration and give the leaves below some fall colors!

Sugar Maple

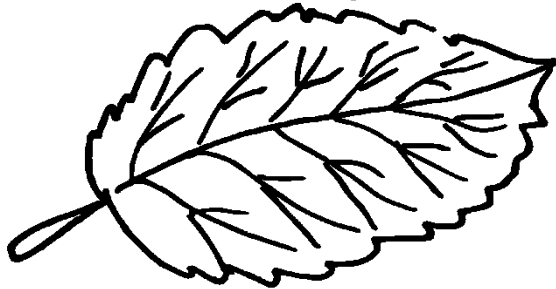


Red Oak

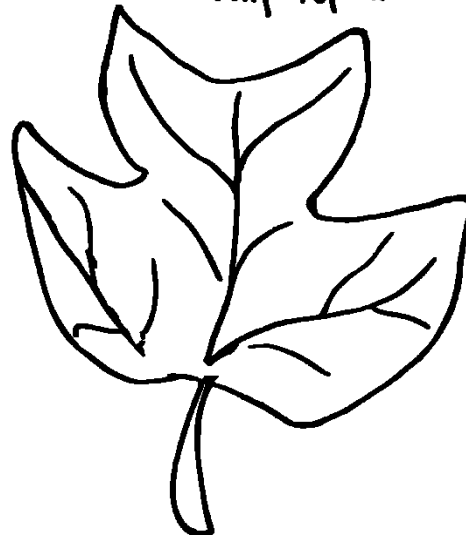


Eastern Hemlock
(PA's State tree!)

Birch



Tulip Poplar



Sassafras

