

Welcome to the Tippecanoe Valley School Forest Nature Trail!

This nature trail will take you through part of the Tippecanoe Valley School Forest on a path that is also used for cross country meets. Along the way, you will find some numbered plaques. Please refer to the corresponding paragraphs in this pamphlet for information.



1 Black Cherry: This tree has a large poison ivy vine growing up the tree. Poison ivy vines are different than grape vines. Grape vines do not attach to the tree. It starts growing with the tree. Poison ivy vines attach themselves to the tree and can grow up the tree on their own. Black cherries are easily identified by their very broken, dark brown to black bark. These trees bear fruit and are important to wildlife.

2 Sugar Maple: These are easily identified because the leaves look like the leaf that is on the Canadian flag. We call this kind of tree a hard maple because of the type of lumber it produces. Sugar Maples are tapped for maple syrup! This means that a hole is drilled into the side of the tree and a spile, a hook-like device with a spout at the end, is inserted. Once the spile is secure, a bucket is placed underneath the spout and is ready to catch the sap. The sap is then boiled so it can be turned into syrup. It takes about 35 gallons of sap to make one gallon of syrup.

5 Red Oak: Red oak trees are known for acorns. Good acorn crops are produced every 2 to 5 years. Red oak is related to the white oak, but the leaves have a distinguishing difference: Red oaks have edges that are pointy, while white oaks have rounded leaves. Also, red oak wood is 'open-pored'. This means that if you were to make a whiskey or wine barrel out of its wood, the liquid would just seep out. White oak would be a better choice to make a barrel because it has closed pores. Red oak trees usually have a life expectancy of 200 years.

9 Swamp White Oak: The leaves on the swamp white oak make it easier to be identified. The underside of the leaf is lighter than the top of the leaf. Also the leaves are rounded on the edges. Swamp white oaks are relatively rapid growing and long-lived. Sometimes they can become 300 years old! These trees can cross-breed with bur oak, making it difficult to determine what species of tree it is. One way you can tell is to look at the ground for acorns. Swamp white oaks have a stalked, small cup; bur oaks have no stalk, are large, and have a burr-like fringe along the edge. If you notice one of these trees, watch out for squirrels.

2 Grey Elm: This particular tree has Virginia creeper on it. This is similar to poison ivy because it attaches itself to the tree and grows upward, but it is not poisonous. A common disease associated with elm trees is the Dutch Elm disease. Dutch Elm disease is caused by a fungus and is spread by bark beetles. If you look on the opposite side of the trail, you can see a dead elm tree. Freshly dead elms attract morels, great for mushroom hunters. **Fun Fact:** Elm was used to make the wheel hubs of wooden wagons because the grain is interlocking and did not split when the spokes were driven into them.

3 Pawpaw Patch: This particular patch is actually a lot of small trees. Pawpaw trees are an understory tree that is usually associated with oak, cherry, and swamp chestnut. These trees produce a purple flower in the spring, and then late summer or early fall, large edible fruits mature. These fruits are delicious to eat, but you must get to them before all the wildlife. Since these trees are sometimes hard to identify, in the winter if you see something that looks like an upside down "J", it is probably a pawpaw tree.

6 Stump: On this particular stump, it is easy to see the year rings. Each ring represents a year of life for a tree. As you can see, in some places the rings are more spread out versus toward the outside they are closer together. This is due to how fast the tree grew. The rings that are farther apart show that the tree grew rapidly during that time. Where the rings are closer together, that means the tree slowed down while growing. Near this stump, you can see a taller stump that has a deep cut all the way around it. This tree was girdled by a forester. Girdling kills the tree to make room for more desirable trees close by.

8 Mulberry Tree: Many can identify this tree by its delicious fruit that ripens in the summer. The berries that are produced are important to wildlife, such as birds. Mulberries make a sweet jam, too. These trees tend to grow on the edge of the woods because they favor the sun.

7 Prickly Ash: This tree can be identified by its compound leaves. The leaflets are in pairs all the way up the stem or petiole. At the top of the stem is a single leaf. Prickly ash is commonly found in old pasture ground. Their thorns kept livestock from damaging them.



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Hackberry: The leaves on this tree are fuzzy. The bark makes it easier to distinguish from other trees. The bark is a light-yellowish brown with narrow ridges and bump-like projections. It is common for hackberry trees to produce berries in the fall. Usually you can not identify a hackberry by their dropped berries. Birds eat the berries too quickly before they can even fall. If you turn around on the opposite side of the path, there is a smaller hackberry tree where you can look at the bark and leaves that were described earlier.

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Bitternut Hickory: If you look on the ground, you can see hickory nuts. The leaf pattern is compound with 3 or 4 pairs of leaves. Neither livestock nor humans like the taste of bitternut. This type of wood is used for producing smoke that gives hams and bacon a hickory-smoked flavor.

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Walnut: Leaves are compound with pairs of leaflets but no single leaf at the end. Usually there will be walnuts on the ground. These nuts are also edible. If you were to cut a little of the bark off, the inner bark is chocolate brown. Walnut trees produce one of the most desirable and valuable types of lumber in our area.

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Grape Vine: This vine is sometimes mistaken for poison ivy, but grape vines do not have "roots" sticking to the bark, allowing it to climb. The grape vine that you see on this tree is as old as the tree. Grape vines grow up with the tree. Grape vines can make trees more prone to being damaged during storms. They can become top heavy and break off. Foresters recommend cutting grape vines to help out the trees.

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White Oak: As mentioned earlier, white oak has rounded lobes on their leaves. Their pores are very tight and can hold water if made into a barrel. The bark on this tree is blocky for the first 8 feet (from the ground), but as you look up towards the top of the tree, you can see that the bark scales become longer and look like they peel off sideways. Acorns in the red oak and white oak family differ in the way they germinate. White oak acorns germinate in the fall when they ripen and fall to the ground. Red oak acorns also ripen that time of year but do not germinate until the spring. In fact, without being 'stratified', exposed to cold winter temperatures, they do not germinate at all. Squirrels know that white oak acorns would spoil by germinating in their caches so they nip the germ out of the acorns before storing them away. They do the same with corn.

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Hawthorn: This particular plant is known as a shrub or a small tree. There are so many different species of the hawthorn that sometimes it is hard to identify which one it is exactly. These shrubs have small apple-like fruit and (usually) thorny branches. The most common type of bark that you will see in this species is smooth grey. Hawthorns provide food and shelter for many species of birds and mammals, and the flowers are important for many nectar-feeding insects.

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Wet Land: As you can see in this particular area, the trees seem to be less dense. This is because there is a wetland just past this tree line. At the edge of wetlands, trees become more scarce. Most trees cannot survive in such a wet environment so they naturally do not settle there. Willow and cottonwood are species that tolerate high water tables.

There are three major soil types on the property. All of them develop on glacial till plains, moraines, and outwash left after the glaciers of the last ice age (Wisconsin glaciation) retreated about 10,000 years ago. The hill sits on Coloma loamy sand which is well drained. The bottom of the hill is classified as Crosier loam, which drains more slowly. The wetland formed on Houghton muck, which is organic material that has not decomposed completely.

This project was realized by Rayanna Reffitt during a summer internship with Pike Lumber Company in 2013. Thank you to Brett Boggs, Kirk Doehrmann, Todd Glenn, and Nancee K. Ward for their help.



Jewel Weed



Garlic Mustard

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Garlic Mustard: This is an invasive species. Invasive means coming from a different ecosystem and has to be considered a nuisance species. It disturbs the native plant communities and can sometimes lead to extinction of the native plant. Even if treated, garlic mustard is known to spread readily because the seeds stick to wildlife, such as deer, and anywhere the wildlife has walked the seeds could be released to the ground to grow.

There is also jewel weed growing in this area. It flowers in July or August. As a folk remedy, one can rub jewel weed leaves on a poison ivy rash to reduce the itching.

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Final Stop: The woods here at Tippecanoe Valley Schools holds more natural history than could be contained in even a library of books. We hope we were able to at least scratch the surface and got you interested in learning more. Turn right when you exit the woods and you will get back to the parking lot.