



Caution & Credits



When you are out exploring and looking at trees, be on the lookout for poison ivy! Poison Ivy is a vine that can grow on the ground or on the trunks of trees. In Indiana, if it is growing on a tree it is sometimes called poison oak by mistake. Poison ivy causes most people to break out in an itchy rash that can last up to 30 days. The rash is caused by an invisible oil the plant makes. The oil is easily spread, even from touching your shoes after walking through the ivy. A good saying to remember is, "Leaves of 3, let it be!"

Credits

Drawings of the leaves and seeds of the trees are courtesy of the Arbor Day Foundation (www.arborday.org)

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Glossary

alternate arrangement - leaves that are not directly across from each other on the stem.

blade - the flat part of a leaf.

compound leaf - a leaf that has more than one blade on a single stem.

conifer - a tree that has cones.

deciduous - a tree that sheds all of its leaves every year.

evergreen - a tree with needles or that keeps its leaves all year.

sinus

lobe - the parts of some leaves that stick out and give a leaf its shape.

margin - the edge of a leaf. It can be smooth, toothed, or lobed.

native trees - trees that are naturally found in an area.

opposite arrangement - leaves that are directly across from each other on the stem.

lobe

simple leaf - a leaf that has only one blade on each stem.

sinus - the space between two lobes on a leaf.







Pawpaw

also known as Indian Banana, Custard Apple



In spring the pawpaw blooms with unique, dark purple flowers before leaves begin to emerge. The **simple leaves** are long and skinny like a tropical plant and in the fall tasty, tropical-like fruit ripens on the tree. The fruit is said to taste like a mixture of bananas, pineapples, and mangoes and is often used to make ice cream and pie.

DID YOU KNOW?

There used to be so many wild pawpaw trees that the fruit would be commercially harvested. Now there are so few left that usually animals get to the fruit first!

The Importance of Native Trees

Why should I care about trees?

Trees help clean our air and water from pollution. Trees help fight climate change by taking lots of carbon dioxide out of the air and changing it into oxygen for us to breathe. Trees also keep our towns and cities cooler by reducing surface and air temperatures, which helps us to save energy. However, of Indiana's original 19.5 million acres of forests, only 4.7 million acres remain.

What can I do?

Whenever possible, don't cut down a tree! If you must cut one down, make sure you plant a new, native tree, or donate one to be planted somewhere else. Native trees from Indiana are used to the weather here. They provide the perfect shelter for wildlife and they grow fruits and seeds at just the right times for birds, animals, and insects to eat.

History in the Rings of a Tree

What's in a ring?

A tree grows larger by adding new layers of wood during the spring and summer. However, it grows faster in the spring, which makes the new wood lighter, and slower in the summer, which makes it darker. When a tree is cut down, the different colors make it look like the tree has rings. The rings of a tree give us lots of information. By counting the dark color rings, you can see how old the tree is. If the rings are perfectly centered, it means the tree grew up straight, and if they are not it means the tree was leaning to one side. If a ring is thinner than others, it means it didn't grow much that year. Maybe the tree didn't get much water or sunshine that year, or perhaps insects ate a bunch of its leaves. Scars and fire damage can also be seen in the rings.

American Sycamore

also known as Plane Tree, Buttonwood, Buttonball Tree



The sycamore tree is easy to tell from a distance because of its brown bark that falls off in places to reveal white inner bark, giving it a spotted look. The blade of the sycamore leaf is often wider than it is long. The fruit of the sycamore tree grows in groups in a tightly packed ball. When they ripen in the fall, they begin to break apart and release fluffy seeds that float away in the wind.

FUN FACT

The American sycamore tree is thought to have gotten its name from early settlers who thought the leaves looked like those of the sycamore tree in Europe. However, that tree is actually a kind of maple tree!

Flowering Dogwood

also known as American Boxwood, St. Peter's Crown



Known for being covered with white flowers in April and May, dogwood trees are also available with pink or red flowers. In the winter, the dogwood's bright red berries are a favorite food of birds, but it may be poisonous to humans. The dogwood tree has extremely hard wood that has been used to make pulleys, handles, and golf clubs.

FUN FACT

Native Americans used dogwood tea to treat fevers, and during the Civil War doctors in the Confederacy used dogwood tea to treat malaria.

Eastern Redbud

also known as American Redbud



The redbud tree is famous for its irregular pattern of branches that become covered in pinkish-purple flowers in the early spring before the new leaves begin to grow. The trunk will often divide itself near the ground to become a multi-trunk tree. The leaves are heart-shaped and have a smooth **margin**.

FUN FACT

The flowers of the redbud tree have more Vitamin C than most fruits and vegetables and can be eaten right off the tree! The seeds were also a favorite of Native Americans who would roast them over a fire. Black Walnut also known as American Black Walnut



The trunk of the black walnut tree is very distinctive, with deep grooves that form a diamond-like pattern. The tree is one of the last to grow its leaves in the spring and one of the first to drop them in the fall. Famous for the walnuts it produces, its wood has been called the most beautiful from a native American tree and is used to make many things. A chemical in the tree kills many kinds of vegetable plants.

DID YOU KNOW?

Sometimes called an American's "best friend", the tree has been used throughout history for food, furniture, gun stocks, fence posts, dyes, inks, and medicines.

Tulip Tree

also known as Yellow Poplar, Tulip Poplar



The state tree of Indiana, Kentucky and Tennessee is named either for its tulip-shaped flowers or its leaves that look like tulips, but we're not sure which one. The flowers are yellow-green with an orange stripe near the bottom and appear high in the tree tops after the leaves grow, so they are often hard to see. The trunk is very straight and usually doesn't have lower branches near the ground.

FUN FACT

Native Americans would use the long, straight trunk of a single tulip tree to make a strong but lightweight dug-out canoe!

Black Locust also known as Yellow Locust, False Acacia



The bark of the black locust tree is very dark with deep grooves in it that resemble a bundle of ropes. It has simple, **compound leaves** that are more oval in shape, and has small thorns on its branches. It is considered invasive in some states because it spreads so easily. Often confused with a honey locust tree, the honey locust has smooth bark; longer, toothed leaves; and clusters of long thorns on its trunk!

DID YOU KNOW?

The black locust tree is the strongest and most rot resistant wood that grows in the U.S. and is naturally waterproof. It is also insect resistant, making it ideal for outdoor furniture and decks.

Eastern Red Cedar

also known as Virginia Juniper, Carolina Cedar



The leaves of the eastern red cedar almost look like scales on a reptile or fish. The female tree produces blue-gray cones that look like berries and are a prized food for many birds and small mammals. The wood has a strong, pleasant smell and is used to make chests, cabinets, carvings, fence posts, and incense. Younger trees are pyramid-shaped but can become more column-like as they mature.

DID YOU KNOW?

The leaves of the eastern red cedar used to be burned and the smoke inhaled as a treatment for colds, bronchitis, and rheumatism.

Shagbark Hickory

also known as Carolina Hickory, Scalybark Hickory



As the shagbark hickory tree matures, its bark begins to look as if it is peeling off the trunk in long strips, giving the tree its name. The small-toothed, compound leaves appear most often in groups of five, but there will sometimes be a group of seven or nine leaves. The hickory tree is known for its edible nuts and its tough wood, which is often used to smoke meats.

FUN FACT

Before he became the 7th president of the U.S., General Andrew Jackson was called "Old Hickory" by his militia because he was as tough as a hickory tree!

Eastern White Pine

also known as Weymouth Pine



The eastern white pine tree can be easily identified when compared to other pine trees due to its horizontal branches that grow in rows, with no more than one row added per year. It can also be identified by its needles, which grow in bunches of five and only near the ends of its twigs, not along its branches. It is the largest **conifer** and most common lumber tree and in Indiana.

DID YOU KNOW?

The eastern white pine tree was prized for its long, straight trunks for use as ship masts. It is also called the Weymouth pine after Captain George Weymouth, who carried its seeds to England for planting in 1605.

Red Mulberry

also known as Moral



The **blade** of the mulberry leaf has a toothed-margin and can vary in shape, even on the same tree! This tree is known for its sweet fruit which is used to make pies, jellies, jams, and wines. The fruit can also be eaten right off of the tree. But be careful! The fruit is very messy and can stain your fingers, your clothes, and even the sidewalk.

FUN FACT

The inner bark of young mulberry trees is very stringy. Native Americans would harvest and use this fiber to weave cloaks.

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Persimmon

also known as Possumwood, Date Plum, Winter Plum



The persimmon is a **deciduous** tree with very distinctive, dark gray bark that is broken into rectangular blocks. The smooth-margin leaves have a glossy look and feel to them on the top side. The tree produces edible fruit that matures to an orange or purple color in the fall, but it is too soft to ship to grocery stores. Local eateries will use it to make ice cream, pie, or the Indiana favorite, persimmon pudding!

FUN FACT

The name persimmon comes from the Native American Algonquin words "pasiminan" or "pessamin", which means "dried fruit". Native Americans would dry the fruit, store them, and eat them during the winter! White Oak also known as Northern White Oak, Stave Oak



The leaves of the white oak have deep lobes like the northern red oak. However, the lobes are rounded rather than pointy. The bark is a light gray color, with shallow grooves and ridges that look like scales. The white oak tree is prized for making barrels and, like other oak trees, all kinds of furniture. It was used to make ships until World War II.

DID YOU KNOW?

White oak was used to build the USS Constitution, a colonial frigate that earned the nickname "Old Ironsides" in battle because cannonballs seemed to bounce off them! She still floats in Boston Harbor.

Sweet Gum

also known as Sweetgum, Starleaf Gum, Alligator Tree



The leaves of the sweet gum tree are a bright green color, with toothed margins and deep lobes that give it a star shape. It is easily recognizable by its fruit, a one inch hard ball with spikes all over it. They usually fall from the tree in winter or early spring, and can be dangerous to walk or bike on because they are so hard. Even a car doesn't crush them, and will instead be lifted off the ground!

FUN FACT

The pioneers would peel back the bark or make a small cut in the tree to get its thick sap. They used it to make chewing gum, perfumes, and medicines!



The sassafras tree is known for its mitten-shaped leaves, but the leaves actually come in three shapes - they can have I, 2, or even no "thumbs", which are called **lobes**. Female trees will have dark-blue fruits grown on red stems appear in late summer. The roots of the sassafras tree produce an oil that is used to perfume soaps and was used in foods and teas until potential cancer risks were discovered.

DID YOU KNOW?

Root beer was originally made from the roots of the sassafras tree, which is where root beer gets its name. However, sassafras root is no longer used today.

Slippery Elm

also known as Red Elm, Gray Elm, Soft Elm



The slippery elm is named for its red, slippery, almost slimy inner bark. The tree also seems to be very "hairy". It has unusual, brown buds in winter that are covered with an orange-red hair, and the twigs on the branches are covered in small, soft hairs. Its dark green leaves are in an **alternate arrangement**, and while the top sides feel like sandpaper, the bottom sides are hairy!

DID YOU KNOW?

The slippery inner bark of the elm tree is used as an ingredient in cough medicines, cough drops, and throat lozenges to treat sore throats!



The leaf of the sugar maple is easily recognizable by it lobes and deep **sinuses** and from being on the Canadian flag. It is one of the most beautiful trees in fall, prized for its brilliant red, orange, and yellow colors. The bark is smooth when the tree is young, but becomes scaly with age. Like the northern red oak, it is a very popular lumber tree.

Fun Fact

Native Americans taught the early settlers how to boil sap from the sugar maple tree to make maple syrup. Each tree produces 5-60 gallons of sap per year, and it takes 32 gallons of sap to make 1 gallon of syrup.

Northern Red Oak

also known as Red Oak



The lobes of the leaves of the northern red oak tree have a sharp tip to them, which sets them apart from the white oak tree. The trunk of the tree almost looks like it has stripes, with strips of smooth bark separated by deep grooves. Known for its amazing fall colors, the lower part of the tree is clear of branches. It is also known for its hardwood lumber, which is used for floors and many types of furniture.

DID YOU KNOW?

The red oak has been a national treasure since colonial times for both its beauty and its lumber. We began transplanting them to Europe in the 17th century!

Eastern Hemlock

also known as Canadian Hemlock



When this is tree is left to grow on its own, it will grow fairly tall in the shape of a pyramid, as most evergreen trees do. However, this tree is unusual in that it can be trimmed and cut into any shape without dying, so it will often be grown as a hedge or bush. The short needles of the hemlock are dark green on top and silvery underneath and grow in an **opposite arrangement**.

FUN FACT

The hemlock tree should not be confused with poison hemlock, as the tree is not dangerous in any way. In fact, pioneers used it to make both tea and brooms!

American Beech

also known as White Beech, Beechnut, Red Beech



Beechnuts are a favorite food of many animals, including turkeys, foxes, bears, raccoons and squirrels. This tree is also known for its soft, smooth, gray bark. This bark has made it a favorite for carving words into for thousands of years. In fact, the word "book" may ultimately come from "beece" or beech. Unfortunately, it is common to see where people have carved their names into live beech trees.

FUN FACT

The American beech tree spreads by growing new trees off of the roots of a mature tree. Entire groves have been found that grew from the roots of a single tree!

Cottonwood also known as Carolina Poplar, Necklace Poplar



The cottonwood tree is named because of its seeds that look like cotton as they blow in the breeze. Before they take flight, the seed capsules look like a string of beads. The triangular leaves have coarse teeth on their margin. The cottonwood grows fast, usually between 5 and 13 feet per year. Unfortunately, this makes the wood weak and the tree short-lived, compared to other trees.

DID YOU KNOW?

If you cut a twig off of the tree and stick it in the ground, it may sprout roots and begin to grow into a new tree. This can also sometimes happen in a storm!