



Guide to Tree Identification & Common Native Trees



In cooperation with



Original pen illustrations were drawn by Jane Rabinovitch, Fairfax County Master Gardener. Read more about Jane, “The Sketcher’s Garden in Winter,” FairfaxGardening.org/sketchers-winter-garden.

Fairfax County Master Gardeners, a not for profit, volunteer organization educating and serving the residents of Fairfax County, Virginia, is part of the Virginia Cooperative Extension Program of Virginia’s two land grant universities, Virginia Tech and Virginia State University.

Master Gardeners educate and provide science-based information on horticultural topics to neighbors and the public broadly. In this guide, we join Plant NOVA Natives and the Virginia Cooperative Extension to Celebrate Native Trees.

The information in this guide is based upon Virginia Tech Dendrology, North Carolina State Factsheets, VA Dept of Forestry, and other authoritative sources of horticultural information.

Edition 1. Published September 2021.



Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg, VA 24061, United States; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg, VA, United States.

Visit our website at FairfaxGardening.org

**Search YouTube for
Fairfax County Master Gardeners**
for our informational videos.

Get to Know Some Common Native Trees

Trees are alive. Trees, like humans, respond to their environments, to each other, and to human interaction. Disruption or heavy use around a tree can compact the soil and damage its roots. Improper pruning of branches and limbs can prevent the tree from sealing the wound properly. This open wound then leaves an open door for diseases, pests, and wildlife to enter the tree, potentially leading to its early death. Additionally, the bad practice of piling mulch or soil above the root flare, the place where the roots and trunk meet, stifles oxygen exchange, creates an overly moist environment that damages the trunk, and allows insect and disease penetration. It can also confuse the tree root system and trigger the growth of an encircling root girdle that will eventually strangle and kill the tree.

In this guide, we wanted to remind our readers that trees are alive. Each tree summary is written in first person from the tree's perspective to make each tree come alive in the minds and imagination of its readers—particularly our young readers.

There are a lot of excellent references on trees. This guide's focus is to help identify trees you might see in your yard, community, forest, or other location. It provides information on key characteristics, leaf arrangement and shape, flower, fruit, and bark. The guide does not cover selection of trees for a specific habitat.

What Is in This Guide?

This guide presents a small selection of native trees most common in Northern Virginia. It is organized to assist Fairfax County residents of all ages identify native trees by focusing on the key characteristics—leaf attachment, leaf shape and margins, flowers, and fruit.

We included several non-native invasive trees of particular concern in Virginia. These non-native trees threaten native species because they outcompete native tree species for sun and nutrients. In one case, the invasive tree-of-heaven (*Alianthus altissima*) not only threatens native plants but also is the host to the spotted lanternfly that is threatening, spreading, and ravaging Virginia crops and native trees.

How to Use this Guide

Contents (page 5) lists trees alphabetically by common name.

Tables 1 and 2 (pages 6 and 7) provides a list of how leaves are attached to your tree – opposite or alternate. Plants are listed alphabetically for each of these attachments.

Table 3 (page 8) lists trees by leaf shape. Trees in each grouping are listed alphabetically by common name or family grouping, such as oaks and maples.

Each summary provides information helpful in identifying the tree. We encourage you to “Say it like a botanist” by using the phonetic pronunciation provided for the scientific names. To engage young readers, we’ve included information about how wildlife and native peoples use each tree. Adding the family grouping allows readers to see the relationships between trees. The family is part of the scientific lineage used to classify each plant. It helps show relations between trees even though the common names seem unconnected.

Table 4 (page 18), “Identifying Trees with Scale- or Awl-Like Leaves,” provides a pictorial key to differentiate trees with leaves arranged around the twig from trees with leaves in flat sprays.

Table 5 (page 38), “Trees with Needles,” provides an identification key with pictures to differentiate pines, firs, spruce, and hemlock/cypress.

Poison Ivy. Page 36 provides information to identify poison ivy. Anyone walking through the woods should be able to recognize this irritating native plant and vine to avoid contact and the skin blisters that can result.

Invasives. The Virginia Department of Conservation and Recreation has identified a list of invasive, non-native plants for Virginia and ranked them high, medium, and low. We highlight four of the highly invasive plants on this list that are common in our Northern Virginia area on pages 37-41. Pages 42-43 include a number of invasive plants that residents should control because they threaten the health of shrubs and trees in our landscapes.

Additional Resources

Common Native Trees of Virginia, VA Dept. of Forestry, https://dof.virginia.gov/wp-content/uploads/Common-Native-Trees-ID_pub.pdf

Keys to Leaves of Virginia Trees, Virginia Tech, <https://dendro.cnre.vt.edu/forsite/key/intro.htm>

Native Plants for Northern Virginia, Plant NOVA Natives, <https://www.plantnovanatives.org/quick-start-guide>

Native Plants for Conservation, Restoration, and Landscaping, VA Dept. of Conservation and Recreation, <https://www.dcr.virginia.gov/natural-heritage/document/pied-nat-plants.pdf>

Native Trees, Plant NOVA Natives <https://www.plantnovanatives.org/native-trees>

Tree Identification, VA Dept. of Forestry, <https://dof.virginia.gov/education-and-recreation/learn-about-education-recreation/tree-identification/>

Virginia Tech Dendrology Factsheets, Virginia Tech, <https://www.dcr.virginia.gov/natural-heritage/document/pied-nat-plants.pdf>

Virginia Invasive Plant Species List, VA Dept. of Conservation and Recreation, <https://www.dcr.virginia.gov/natural-heritage/invspdflist>

Trees in This Guide

Plant	Leaf Arrangement	Leaf Shape	Leaf Margin	Page
American Beech (<i>Fagus grandifolia</i>)	Alternate	Simple	Toothed	9
American Holly (<i>Ilex opaca</i>)	Alternate	Simple, Lobed	Toothed	10
American Hornbeam (<i>Carpinus caroliniana</i>)	Alternate	Simple	Toothed	11
American Persimmon (<i>Diospyros virginiana</i>)	Alternate	Simple	Smooth (entire)	12
American Sweetgum (<i>Liquidambar styraciflua</i>)	Alternate	Simple, Lobed	Toothed	13
Black Cherry (<i>Prunus serotina</i>)	Alternate	Simple	Toothed	14
Dwarf Chestnut, aka Allegheny Chinkapin (<i>Castanea pumila</i>)	Alternate	Simple	Toothed	15
Eastern Red Cedar (<i>Juniperus virginiana</i>)	Opposite	Scale		17
Eastern Redbud (<i>Cercis canadensis</i>)	Alternate	Simple	Smooth (entire)	18
Flowering Dogwood (<i>Cornus florida</i>)	Opposite	Simple	Smooth (entire)	19
Fringe Tree (<i>Chionanthus virginicus</i>)	Opposite	Simple	Smooth (entire)	20
Maple: Red Maple (<i>Acer rubrum</i>)	Opposite	Simple, Lobed	Toothed	21
Maple: Sugar Maple (<i>Acer saccharum</i>)	Opposite	Simple, Lobed	Toothed	22
Mockernut Hickory (<i>Carya tomentosa</i>)	Alternate	Compound	Toothed	23
Oak: Northern Red Oak (<i>Quercus rubra</i>)	Alternate	Simple, Lobed	Smooth (entire)	25
Oak: White Oak (<i>Quercus alba</i>)	Alternate	Simple, Lobed	Smooth (entire)	26
Oak: Willow Oak (<i>Quercus phellos</i>)	Alternate	Simple	Smooth (entire)	27
Pawpaw (<i>Asimina triloba</i>)	Alternate	Simple	Smooth (entire)	28
River Birch (<i>Betula nigra</i>)	Alternate	Simple, Lobed	Toothed	29
Sassafras (<i>Sassafras albidum</i>)	Alternate	Simple	Smooth (entire)	30
Sweetbay Magnolia (<i>Magnolia virginiana</i>)	Alternate	Simple	Smooth (entire)	31
Tulip Poplar (<i>Liriodendron tulipifera</i>)	Alternate	Simple, Lobed	Smooth (entire)	32
Witch Hazel (<i>Hamamelis virginiana</i>)	Alternate	Simple	Wavy	33
Virginia Pine (<i>Pinus virginiana</i>)	Alternate	Needle		35
Poison Ivy (<i>Toxicodendron radicans</i>)	Alternate	Compound	Toothed	36
Autumn Olive (<i>Elaeagnus umbellata</i>) and Russian Olive (<i>E. angustifolia</i>) (Invasive)	Alternate	Simple	Smooth (entire)	37
Burning Bush, Winged Euonymus (<i>Euonymus alatus</i>) (Invasive)	Alternate	Simple	Toothed	40
Bush Honeysuckles (<i>Lonicera spp.</i>) (Invasive)	Opposite	Simple	Smooth (entire)	39
Tree-of-Heaven (<i>Ailanthus altissima</i>) (Invasive)	Alternate	Compound	Smooth (entire)	40
Tree-of-Heaven and Native Look-Alikes				41

Note: Plants in orange highlight are considered non-native and invasive.

Trees with Opposite Leaf Arrangement



Trees with opposite leaf arrangement are maples, ash, dogwood, members of the Caprifoliaceae family (viburnums and honeysuckle), and horse chestnut. Botanists use the acronym 'MADCap Horse' to remember these trees.

Table 1. Trees with Opposite Leaf Arrangement

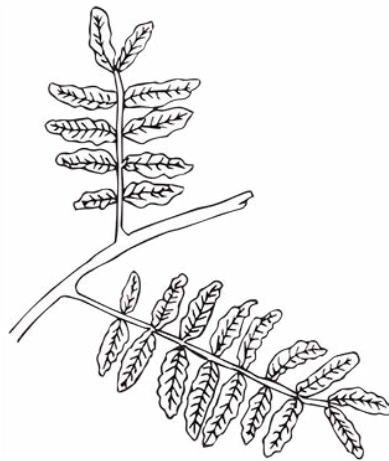
Plant	Scientific Name	Leaf Shape	Leaf Margin	Page
Eastern Red Cedar	<i>Juniperus virginiana</i>	Scale		17
Flowering Dogwood	<i>Cornus florida</i>	Simple	Smooth (entire)	19
Fringe Tree	<i>Chionanthus virginicus</i>	Simple	Smooth (entire)	20
Red Maple	<i>Acer rubrum</i>	Simple, Lobed	Toothed	21
Sugar Maple	<i>Acer saccharum</i>	Simple, Lobed	Toothed	22
Bush Honeysuckles	<i>Lonicera</i> spp.	Simple	Smooth (entire)	38

Note: Plants highlighted in orange are considered non-native and invasive.

Type of Leaf Shapes



Simple leaf



Compound leaf



Needle-like
(White Pine)



Scale-like
(Red Cedar)

Type of Leaf Margins



Entire



Wavy



Finely
Toothed



Coarsely
Toothed



Doubly
Toothed



Incurved
Teeth



Bluntly
Toothed



Lobed

Sources: Virginia Commonwealth University, <http://online.vcu.edu/experience/id.html>; Virginia Department of Forestry, <https://dof.virginia.gov/education-and-recreation/learn-about-education-recreation/tree-identification/>

Plants With Alternate Leaf Arrangement



Most trees have alternate leaf arrangements. These leaves grow in a staggered pattern on the branch.

Table 2. Trees and Plants with Alternative Leaf Attachment

Plant	Scientific Name	Leaf Shape	Leaf Margin	Page
American Beech	<i>Fagus grandifolia</i>	Simple	Toothed	9
American Holly	<i>Ilex opaca</i>	Simple, Lobed	Toothed	10
American Hornbeam	<i>Carpinus caroliniana</i>	Simple	Toothed	11
American Persimmon	<i>Diospyros virginiana</i>	Simple	Smooth (entire)	12
American Sweetgum	<i>Liquidambar styraciflua</i>	Simple, Lobed	Toothed	13
Black Cherry	<i>Prunus serotina</i>	Simple	Toothed	14
Dwarf Chestnut, aka Allegheny Chinkapin	<i>Castanea pumila</i>	Simple	Toothed	15
Eastern Redbud	<i>Cercis canadensis</i>	Simple	Smooth (entire)	18
Mockernut Hickory	<i>Carya tomentosa</i>	Compound	Toothed	23
Northern Red Oak	<i>Quercus rubra</i>	Simple, Lobed	Smooth (entire)	25
Pawpaw	<i>Asimina triloba</i>	Simple	Smooth (entire)	28
Poison Ivy (Native Vine)	<i>Toxicodendron radicans</i>	Compound	Toothed	36
River Birch	<i>Betula nigra</i>	Simple, Lobed	Toothed	29
Sassafras	<i>Sassafras albidum</i>	Simple	Smooth (entire)	30
Sweetbay Magnolia	<i>Magnolia virginiana</i>	Simple	Smooth (entire)	31
Tulip Poplar	<i>Liriodendron tulipifera</i>	Simple, Lobed	Smooth (entire)	32
Virginia Pine	<i>Pinus virginiana</i>	Needle		35
White Oak	<i>Quercus alba</i>	Simple, Lobed	Smooth (entire)	26
Willow Oak	<i>Quercus phellos</i>	Simple	Smooth (entire)	27
Witch Hazel	<i>Hamamelis virginiana</i>	Simple	Wavy	33
Autumn Olive and Russian Olive	<i>Elaeagnus umbellata</i>	Simple	Smooth (entire)	14
Burning Bush, aka Winged Euonymus	<i>Euonymus alatus</i>	Simple	Toothed	39
Tree-of-Heaven	<i>Ailanthus altissima</i>	Compound	Smooth (entire)	40

Note: Plants highlighted in orange are considered non-native and invasive.

Tree List Based on Leaf Shape

Table 3. Trees Listed by Leaf Shape

Leaf Shape	Plant	Scientific Name	Leaf Attachment	Leaf Margin	Page
Compound	Mockernut Hickory	<i>Carya tomentosa</i>	Alternate	Toothed	23
	Tree-of-Heaven	<i>Ailanthus altissima</i>	Alternate	Smooth (entire)	40
	Poison Ivy	<i>Toxicodendron radicans</i>	Alternate	Toothed	36
Needle	Virginia Pine	<i>Pinus virginiana</i>	Alternate		35
Scale	Eastern Red Cedar	<i>Juniperus virginiana</i>	Opposite		17
Simple	American Beech	<i>Fagus grandifolia</i>	Alternate	Toothed	9
	American Hornbeam	<i>Carpinus caroliniana</i>	Alternate	Toothed	11
	American Persimmon	<i>Diospyros virginiana</i>	Alternate	Smooth (entire)	12
	Autumn Olive and Russian Olive	<i>Elaeagnus umbellata</i> <i>E. angustifolia</i>	Alternate	Smooth (entire)	37
	Black Cherry	<i>Prunus serotina</i>	Alternate	Toothed	14
	Burning Bush, aka Winged Euonymus	<i>Euonymus alatus</i>	Alternate	Toothed	39
	Bush Honeysuckles	<i>Lonicera</i> spp.	Opposite	Smooth (entire)	38
	Dwarf Chestnut, aka Allegheny Chinkapin	<i>Castanea pumila</i>	Alternate	Toothed	15
	Eastern Redbud	<i>Cercis canadensis</i>	Alternate	Smooth (entire)	18
	Flowering Dogwood	<i>Cornus florida</i>	Opposite	Smooth (entire)	19
	Fringe Tree	<i>Chionanthus virginicus</i>	Opposite	Smooth (entire)	20
	Willow Oak	<i>Quercus phellos</i>	Alternate	Smooth (entire)	27
	Pawpaw	<i>Asimina triloba</i>	Alternate	Smooth (entire)	28
	Sassafras	<i>Sassafras albidum</i>	Alternate	Smooth (entire)	30
	Sweetbay Magnolia	<i>Magnolia virginiana</i>	Alternate	Smooth (entire)	31
Witch Hazel	<i>Hamamelis virginiana</i>	Alternate	Wavy	33	
Simple, Lobed	American Holly	<i>Ilex opaca</i>	Alternate	Toothed	10
	American Sweetgum	<i>Liquidambar styraciflua</i>	Alternate	Toothed	13
	Maple: Red Maple	<i>Acer rubrum</i>	Opposite	Toothed	21
	Maple: Sugar Maple	<i>Acer saccharum</i>	Opposite	Toothed	22
	Northern Red Oak	<i>Quercus rubra</i>	Alternate	Smooth (entire)	25
	White Oak	<i>Quercus alba</i>	Alternate	Smooth (entire)	26
	River Birch	<i>Betula nigra</i>	Alternate	Toothed	29
	Tulip Poplar	<i>Liriodendron tulipifera</i>	Alternate	Smooth (entire)	32

Note: Plants in orange highlight are considered non-native and invasive.

American Beech

Fagus grandifolia



Say it like a botanist: FAG-us gran-dih-FOH-lee-uh

Member of the beech family, Fagaceae

People also call me Beechnut Tree, Red Beech, Ridge Beech, White Beech

Wildlife and songbirds love to eat my nuts. In fact, people can eat my nuts, but they have a bitter taste and will give you an upset stomach if you eat them raw because they contain the natural chemical, saponic glycoside.

Native peoples used my wood for medicine, food, and building materials. My wood is hard and strong, and it will rot when exposed to weather. Some people use my wood for flooring and to make tools, and others burn my wood for its high fuel content.

Fun Facts: A beech tree in Tennessee had an inscription carved in its trunk, “D. Boone Cilled a Bar on Tree in Year 1760.” When this tree fell in 1916, the Forest Service estimated it was 365 years old.

- I have simple, ovate/oblong leaves with a sharp tip. My edges (leaf margins) are coarsely toothed (dentate) and have a little bristle. If you look at my branches you will see my leaves alternate and are grouped at the end of the branches. In fall my showy leaves turn yellow then brown or copper.
- I have two types of flowers. My female flowers are yellowish green flowers on short spikes; my male flowers droop in long clusters.
- My shiny brown, triangle-shaped fruit grow inside prickly, brown outer husks.
- My smooth gray bark is thin and easily damaged. I am a slow grower that typically reaches 50 to 70 feet; however, I can sometimes grow to 100 feet. I have a rounded dense canopy spreading out to 40 feet wide. Because I send out suckers, I am often found surrounded by young beech trees.



Read More:

American Beech, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=47>

American Beech, North Carolina State, <https://plants.ces.ncsu.edu/plants/fagus-grandifolia>

American Holly

Ilex opaca



Say it like a botanist: EE-leks oh-PAY-kah

Member of the family, Aquifoliaceae, mostly hollies

Wildlife like me to provide cover for them in winter. Songbirds, squirrels, deer, and other small mammals eat my fruit. Honeybees and butterflies love the nectar and pollen in my tiny white flowers.

People thorough the millennia use sprigs of holly as a symbol of good luck, prosperity, and friendship. Some cultures thought the evergreen holly had magical powers.

Fun Facts: People recognize me because I am an evergreen tree with thick, dull dark green spiny leaves. My long spines are evenly spaced.

- I am a tree that is either male or female. That is called dioecious. To produce red berries, we need to have both male and female trees close together.
- My male trees produce greenish-white flowers hanging in clusters (cymes) of three to 13 flowers from April to June. My female trees typically produce a single flower per stem but may also form clusters of two or three flowers.
- My red berries appear on female trees in September and last through the winter, typically until February.
- I am a small tree growing in a pyramidal form to about 40 feet tall. My branches usually grow near the ground on my light gray, smooth trunk.



Read More:

American Holly, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=51>
Ilex opaca, North Carolina State, <https://plants.ces.ncsu.edu/plants/ilex-opaca/>

American Hornbeam

Carpinus caroliniana



Say it like a botanist: kar-PINE-us kair-oh-lin-ee-AN-uh

Member of the birch family, Betulaceae

Some people call me Musciewood, Ironwood, Water Beech, Or Blue Beech.

Note: People also use the common name, 'Ironwood,' for at least two other trees.

To avoid confusion it's best to use the botanical name for trees.

Wildlife love to eat my seeds. Songbirds and squirrels eat my seeds. *Lepidoptera* caterpillars, including the lo (EYE-oh) moth (*Automeris lo*) eat my leaves. Deer nibble on the tips of my twigs. The eastern tiger swallowtail and red-spotted purple rely on me to host its larvae (caterpillars).

People use my heavy hardwood for tool handles, coach wheels, gear pegs and wedges, and yokes for oxen. My wood is hard and difficult to use in making furniture. Pioneers used my wood to make bowls and dishes because my wood does not crack.

Fun facts: People recognize me by the smooth, gray to bluish-gray bark on my twisted trunk. It looks like I have muscles, which is why I am sometimes called 'muscle wood.'

- I have a round crown and broad, elliptical to ovate leaves with edges that look like the teeth of a saw (serrated). My leaves fall off in winter and regrow in spring (deciduous).
- In summer, you will see clusters of three-lobed bracts hanging on a 4- to 5-inch (10 to 13 cm) stalk. My fruit is a small ribbed nutlet inside the bract. My fruit ripens in late summer and fall and is dispersed by wind throughout the winter.
- I am slow growing and will reach 25 to 40 feet in maturity.
- I grow in moist, rich sites with slightly acid soil, often along streams. I am shade tolerant and often grow under taller, hardwood trees. That is why I am called an understory tree.
- I have shallow, wide spreading root system and I do not like compact soil.



Read More:

Hornbeam, Virginia Tech Dendrology at <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=17>
Carpinus caroliniana North Carolina State, <https://plants.ces.ncsu.edu/plants/carpinus-caroliniana/>

American Persimmon

Diospyros virginiana



Say it like a botanist: dy-OS-pe-res ver-jin-ee-AY-nah

Member of the persimmon and ebony family, Ebenaceae

People also call me Date Plum, Possum Apples, Possomwood

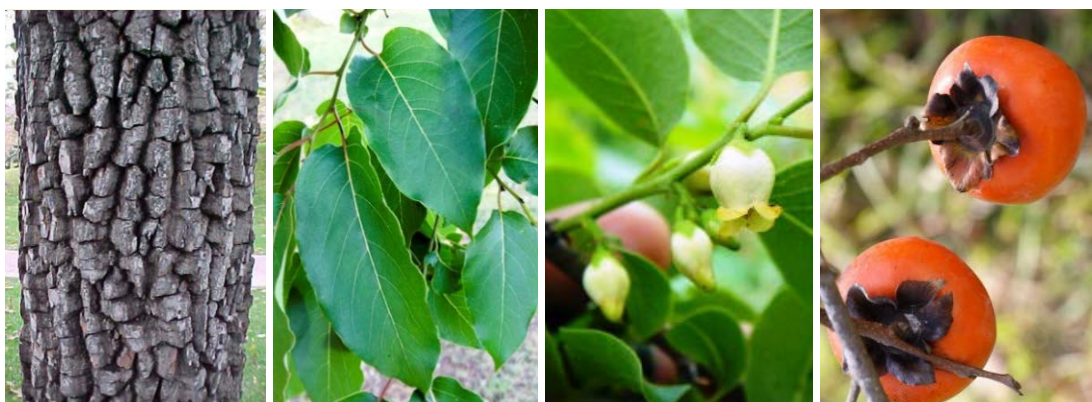


Large wildlife, like deer and other browsers, eat my twigs and leaves. Birds, small mammals, white-tailed deer, foxes, raccoons, and black bears eat my fruit. The larval and caterpillar stage of some moths like the luna moth and hickory horn devil moth feed on my leaves.

Native peoples used my fruit as medicines and my inner bark and unripe fruit to treat fevers, sore throats, diarrhea, and bleeding. My ripe fruit is used in syrups, jellies, ice cream, and pies. Since my heartwood is nearly black and extremely hard, it is used to make golf club heads, pool cues, and shoe lasts (for making and repairing shoes). During the Civil War, Confederate soldiers boiled my seeds to make a coffee substitute. Other people extract a cooking oil from my seeds; it tastes like peanut oil.

Fun Facts: People recognize me by my thick, dark, chunky bark that looks like an alligator. I am known as a messy tree because I drop my slimy, over ripe fruit.

- My bark dark gray bark is broken into rectangular block and looks like an alligator.
- My ovate leaves are simple, long (2 to 6 inches), and narrow and have smooth edges (margins). They look leathery and glossy on top and brown underneath. My leaves alternate on my branches. In fall, my leaves get a purple blotchy color—not all that pretty.
- My tiny white flowers are urn-shaped and fragrant when they appear in late April.
- My trees are either male or female. I depend on birds, bees, and others to pollinate my flowers so I can bare fruit. My fruit is orange and varies in size from ½ to 3½ inches. It ripens from September through November. Wait until my fruit is soft and almost falling from the tree before you pick it. My unripe fruit tastes bitter and tart, so it's not good to eat.
- I am slow growing with a round crown. I typically grow to between 30 to 60 feet; but I can grow as tall as 80 feet.



Read More:

Diospyros virginiana, North Carolina State, <https://plants.ces.ncsu.edu/plants/diospyros-virginiana/>

Common persimmon, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=29>

Diospyros virginiana, Missouri Botanical Garden, <https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=279917&isprofile=0&letter=D>

Common persimmon, University of KY, <https://www.uky.edu/hort/Common-Persimmon>

https://www.srs.fs.usda.gov/pubs/misc/ag_654/volume_2/diospyros/virginiana.htm

American Sweetgum

Liquidambar styraciflua



Say it like a botanist: lih-kwid-AM-bar sty-rak-ee-FLOO-uh

Liquidambar is the only Member of the Altingiaceae family

People also call me Red Sweet Gum

Wildlife, like rabbits and mice, love to nibble on my bark. Chipmunks, squirrels, and about 25 species of birds love my seeds. Insects have a hard time destroying me.

Native peoples used my hardened sap as chewing gum. They also made medicine from my sap. Modern chemists found it contains a chemical that is added to flu medicine. Spanish soldiers in the Cortez expedition combined my sap with tobacco leaves to relax and help them sleep. People today value my straight, hard lumber to make cabinets, musical instruments, veneer to place on top of other wood and other uses.

Fun Facts: People recognize my spiny brown fruit and my deeply lobed star-shaped leaves. My name sweet-gum comes from my light brown sap. My scientific name comes from liquid and amber because I produce an aromatic gummy substance if I am wounded.

- My simple lobed, star-shaped leaves look like a hand (palmate). My leaves have toothed margins (finely serrate). If you crush a leaf, it is fragrant. Fall is my best season because my leaves turn brilliant yellow or gold and sometimes even purple or red.
- You might not notice my yellow green spring flowers. But you will recognize my fruit that looks like a spiny brown, round gum ball in August through September. My fruit usually hangs on the tree and falls off in December through April. These can really create quite a mess! If you look inside my fruit, you will see two tiny seeds. Birds love my seeds in winter. Lots of people collect my spiny pods for craft projects. Can you think of a project for them?
- My bark is gray corky scales with deep furrows.
- I can grow straight and tall up to about 70 feet quickly, especially if I am in moist soil or near a stream. My shape will become like a pyramid with the bottom stretching about 50 feet wide.



Read More:

Sweetgum, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=53>

Liquidambar styraciflua, North Carolina State, <https://plants.ces.ncsu.edu/plants/liquidambar-styraciflua/>

Sweetgum: An ancient source of beneficial compounds with modern benefits, Lingbeck, JM, et. al., Pharmacogn Rev. 2015. Doi: 10.4103/0973-7847.156307, <https://pubmed.ncbi.nlm.nih.gov/26009686/>

Black Cherry

Prunus serotina



Say it like a botanist: PROO-nus seh-roh-TEE-nuh

Member of the Rose family, Rosaceae

People also call me Wild Black Cherry, Wild Cherry, Black Cherry, Wild Rum Cherry

Wildlife love eating my fruit. My flowers provide nectar for pollinators, and I host the larvae for several butterflies, including the eastern tiger swallowtail and the spring azure.

Native peoples used my inner bark to treat colds, but modern scientists found that I contain toxic cyanogenic compounds. You can smell the bitter almond odor in my inner bark. Other people use my wood to make furniture and musical instruments. I am valued because my hard reddish-brown wood looks beautiful when polished and finished.

Fun Facts: People recognize me from my the dark scaly pattern in my silver bark, which is marked by horizontal pores (lenticels). These allow me to exchange the gases from my insides to the atmosphere. As I age my bark breaks into dark gray or black flakey plates.

- My simple green leaves alternate on branches. They are oblong-shaped and have a fine-toothed edge that smell like bitter almonds when crushed. In fall my leaves turn yellow-orange or yellow brown.
- In the spring, I have small white flowers with 4 or 5 petals. In summer, I produce dark purple fruit that wildlife love but tastes bitter.
- Don't eat my bark, leaves, seeds, or stems because they are poisonous to humans, dogs, cats, and horses.



You might see a related native cherry tree called, sweet cherry, *Prunus avium*, which has a different leaf, flower, and bark



Read More:

Black cherry, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=66>
Prunus serotina, North Carolina State, <https://plants.ces.ncsu.edu/plants/prunus-serotina/>

Dwarf Chestnut, Allegheny Chinquapin

Castanea pumila



Say it like a botanist: kas-tah-NAY-ah POO-mil-ah

Member of the beech family, Fagaceae

People also call me Allegheny Chinquapin, Dwarf Chestnut, Common Chinquapin

Wildlife love to eat my nuts in the fall and winter. Woodpeckers, blue jays, squirrels, and sometimes deer eat my seeds. The larvae of many butterflies live on me. Insects love my flower nectar; birds love my fruit.

Native peoples ate my fruit (a small acorn), and in 1612 Captain John Smith recorded the native people called the nut, “checkinquamins.” I got my name, chinquapin, from the Powhatan tribe. Native peoples would make a medicine from my leaves and water. My wood was used for railroad ties. Today my wood is used for fence posts and fuels.

Fun Facts: I am related to the American chestnut, and you can eat my fruit just like the native peoples did.

- My simple, oblong bright yellow-green leaves have a short stem and fine pointed teeth around the margins. You can easily see my leaf veins. On the bottom side of my leaves, I have lots of silvery woolly hairs. My leaves alternate on the branches. In fall, my leaves turn a golden yellow.
- My stems are hairy when I am young, and as I grow up my stems become shiny brown.
- My pale yellow or white flowers bloom in summer from May to July.
- My fruit is a brown nut inside a spiny outer covering called a bur. My seeds mature in autumn and winter.
- I grow between 15 to 30 feet tall and 10 to 20 feet wide. I can have a single trunk or many trunks.



Read More:

Allegheny chinkapin, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=24>
Allegheny chinquapin, North Carolina State, <https://plants.ces.ncsu.edu/plants/castanea-pumila/>

Identifying Trees with Scale- or Awl-like Leaves

Table 4. Scale-Like or Awl-Like (Short, Sharp, Stiff)

Leaves arranged in rounded or 4-sided pattern on the twig

- Common Juniper (*Juniperus communis*)
- Eastern Red Cedar (*Juniperus virginiana*)
- and more

Leaves arranged in flat sprays

- Atlantic White Cedar (*Chamaecyparis thyoides*)
- Northern White Cedar, Eastern Arborvitae (*Thuja occidentalis*)



Eastern Red Cedar

Juniperus virginiana



Say it like a botanist: jew-NIP-er-us ver-jin-ee-AY-nah

Member of the Cypress family, Cupressaceae

Wildlife loves me. I am a significant source of food and shelter for wildlife.

I provide food for the larvae (caterpillar) of the juniper hairstreak butterfly. The blue berries (fruits) on female trees are consumed by a wide variety of wildlife, including the cedar waxwing songbird, which is named for me.

Native peoples used me to make flutes, furniture, mats, incense, spices, and medicines. Today I am used as a windbreak and as a screen. Because my wood is aromatic people use it to make chests and line clothes closets. My wood chips are used to stuff the inside of your pet's bed. My wood resists rot so I make good fence posts and rails.

Fun Facts: People recognize me from my fibrous grayish to reddish-brown bark that comes off my trunk in long strips, my blue berries, and my evergreen, pyramid shape.

- My leaves are very small and look like scales. However, the leaves of young trees look like blue-green needles. In winter, my scaly leaves turn yellow brown.
- My leaves are opposite each other with the scale leaves above and below at right angles (4-rank arrangement). Crazy!
- Look closely. I have two kinds of cones. Male cones are yellow and occur at branch tips. The female forms its tiny blue and frosted looking cones in spring. In fall the female cones become dark blue, berries.
- I live for 100 to 300 years and grow into a pyramid shape reaching 30 to 50 feet tall and 8 to 20 feet wide.



Read More:

Eastern Red Cedar, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=97>
Juniperus virginiana, North Carolina State, <https://plants.ces.ncsu.edu/plants/juniperus-virginiana/>
Red Cedar, Native Tech: <http://www.nativetech.org/plantgath/cedar.htm>

Eastern Redbud

Cercis canadensis



Say it like a botanist: SER-sis kan-a-DEN-sis

Member of the pea, bean (legume) family, Fabaceae

People also call me Redbud, American Judas Tree, Mexican Redbud, Texas Redbud

Wildlife: Butterflies, bees, and insects love my nectar. Many butterflies and moths, like Henry's Elfin butterfly, use me as a host for the larval stage (caterpillars) of their next generation. In the summer, you might see semi-circular cutouts on my leaves. Leaf cutter bees use my leaves to line their nests. Birds, like chickadees, titmice, and woodpeckers love to peck my bark to get the insects hiding there. Deer do not like my leaves, but they love my seed pods.

Native peoples used the wood of a related tree, the California redbud, for bows. Native people harvested my roots to make red dye to color their clothing. Pioneers used my bark as medicine and pioneers and modern people add my tasty blossoms to their salads.

Fun Facts: People recognize me by bright pink, red, or purple flower clusters that welcome spring. When I bloom, people say I look like a purplish cloud.

- My showy flowers are small individually but are grouped in clusters of about seven flowers. They are quite noticeable because they appear in early spring before my leaves.
- My fruit are flat, brown, 2- to 4-inch-long pods that hang down like dry pea pods (legumes). Inside my pods are flat, brown seeds, that mature in late summer.
- My green heart-shaped leaves are simple with smooth (entire) margins that are alternately attached to the branch. In the fall my leaves turn yellow.
- I am an understory tree that grows quickly to only 20 to 30 feet tall, I have a rounded crown with spreading branches expanding 25 to 35 feet wide.
- My dark bark is smooth in youth, but I develop long narrow plates and scales as I age. If you look closely, you might be able to see my orange inner bark. Some trees have a twisted trunk.



Read More:

Eastern redbud, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=43>
Cercis canadensis, North Carolina State, <https://plants.ces.ncsu.edu/plants/cercis-canadensis/>
Redbud, Arbor Day Foundation, <https://www.arborday.org/programs/nationaltree/redbud.cfm>

Flowering Dogwood

Cornus florida



Say it like a botanist: KOR-nus FLOR-ih-dah

Member of the Cornaceae family

Wildlife loves my berry-like fruit. In fact, a lot of animals and 36 species of birds feast on them. But don't try them! They are poisonous to humans!

Native peoples used my roots to lure muskrats into their traps. The chemical called tannins in my bark was used to treat malaria, an illness caused by infected mosquitoes. When dogwoods flowered in the spring, native peoples knew it was time to plant corn. In the past, my twigs were used as toothbrushes. My strong, hard wood is used for tool handles, spindles, and golf club heads.

Fun Facts: People recognize me by my showy flowers in spring, my red berries in fall, and by my shape.

- I am the state flower and tree of Virginia, and I am a deciduous tree that grows 15 to 40 feet tall. I am called an understory tree because I live below taller trees and above shrubs. My canopy is slightly rounded on upturned branches.
- Most people think my flowers are the four large, showy white or pink leaflike petal structures. These are really bracts (leaflike structures) that surround and protect my small green-yellow flowers in the center. My tiny green-yellow flowers have both male and female structures (monoecious).
- My green simple oval leaves have smooth margins and a pointed tip. My leaves grow opposite each other on twigs. The veins in my leaves are very noticeable and come off my center mid-rib in parallel.
- My bark is smooth on young trees but becomes scaly and looks like alligator skin as I mature.
- My fruit is shiny, oval red or orange berries in clusters of three to five berry-like drupes (a fleshy fruit with the seed inside, like a peach). Don't eat my berries! They will make you sick.
- You might want to transplant me from the wild but don't. Moving me might spread a fatal fungal plant disease called *Discula destructiva* anthracnose disease.

Don't get confused. I am the native dogwood tree. Other dogwood trees were imported from far away countries. Some of these imported trees brought the anthracnose disease that kills me. One way to identify non-native dogwoods is by their smooth mottled bark (kousa dogwood), shallow vertical ridges (pagoda dogwood), and smooth gray bark with patches of white (mountain dogwood).



Read More:

Flowering dogwood, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=44>
Cornus florida, North Carolina State, <https://plants.ces.ncsu.edu/plants/cornus-florida/>
Dogwood, Native Tech, <http://www.nativetech.org/plantgath/dogwood.htm>

Fringetree

Chionanthus virginicus



Say it like a botanist: kee-oh-NAN-thus ver-JIN-ih-kus

Member of the olive family, Oleaceae

People also call me White Fringetree, American Fringetree, Old Man's Beard, Grancy Graybeard

Wildlife: Fringetree is a host to the rustic sphinx moth (*Manduca rustica*) in addition to its value in feeding birds and other small mammals. In addition, birds and small mammals eat my fruit.

Native peoples used my bark and flowers to treat skin problems and wounds.

Fun Facts: I resist fire and when deer browse on my leaves, I usually recover.

- I have beautiful, white, fluffy flowers in spring that grow on previous season's wood. Some say my flowers resemble a white beard. This is why I am sometimes called the old-man's beard. My Greek name means snow flower.
- My leaves come out late in the spring at the same time as my flowers. My green leaves are oblong and smooth and spear-shaped and turn yellow in the fall.
- In late summer, I have small, dark blue, olive-shaped fruits that have a fleshy pulp around a seed. Botanists call this type of fruit a drupe. Birds love them. They are also a great food source for small mammals.
- I attract many pollinators, and I am a host plant for the rustic sphinx moth.
- My bark has dark gray-brown ridges with red furrows, spaces between the ridges.
- In the wild, I grow in shady woods and along streambanks, but I can handle many conditions and even air pollution, so I make a great tree for cities and urban areas.



Read More:

Fringetree, NC State Extension, <https://plants.ces.ncsu.edu/plants/chionanthus-virginicus/>

Rustic Sphinx Moth, NC State Extension, <https://content.ces.ncsu.edu/rustic-sphinx>

Fringetree, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=27>

Red Maple

Acer rubrum



Say it like a botanist: AY-ser ROO-brum

A member of the maple family, Sapindaceae

People also call me Scarlet Maple, Swamp Maple, Soft Maple, Carolina Red Maple, Drummond Red Maple, and Water Maple

Large wildlife browses my leaves. They are important food for deer in late fall/early winter. Bees love my flower nectar. Squirrels eat my fruit as their primary food in late winter and early spring when few other food sources exist.

Native peoples used my wood to craft spoons, arrow heads, baskets, and bowls. My leaves were in the Ojibwe bead work designs. My sap was used to make sugar and syrup. The Iroquois dried, pounded, and sifted my bark to make bread. The Cherokee boiled my inner bark with water to use as an eyewash and as an infusion for hives. Pioneers used my bark to make ink and cinnamon-brown and black dyes. Many pioneer and modern people value my relatively soft wood for lots of uses including pulp, sawtimber, veneer, pallets, crates, barrels, flooring, plywood, cabinetry, and railroad ties.

Fun Facts: People recognize me as one of the first trees to flower in spring, well ahead of my leaves. In fact, my name comes from my reddish buds that swell in spring, my red stalks (petioles) on leaves in summer, and my brilliant red foliage in fall.

- My small red flowers hang in clusters. Some trees are entirely male; some are entirely female, and others have both male and female flowers.
- My leaves are simple, three to five palmate lobes with a serrated margin that appear opposite on branches.
- My fruit are clusters of 1/2 to 3/4-inch-long samaras (dry fruit) that looks like helicopter wings on long slender stems. My light brown and often reddish fruit ripens in late spring and early summer.
- On young trees, my bark is smooth and light gray. As I age my bark becomes darker and breaks up into long, fine scaly plates.
- I am a medium-sized tree with a rounded crown. I grow up to 90 feet tall. In the forest, my branches appear higher on my trunk, in an open, uncrowded area my branches are lower to the ground and my trunk is shorter.



Read More:

Red maple, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=1>
Acer rubrum, North Carolina State, <https://plants.ces.ncsu.edu/plants/acer-rubrum/>

Sugar Maple

Acer saccharum



Say it like a botanist: AY-ser sa-KAR-um

Member of the Soapberry family, Sapindaceae, which includes horse chestnut, maples, and lychee

People also call me Hard Maple, Northern Sugar Maple

Wildlife loves all parts of me. Squirrels, chipmunks, and rabbits eat my seeds, buds, twigs, and leaves. Porcupines eat my bark in winter. Deer browse my leaves and twigs. They rub their antlers against my trunk and could hurt me if I am young. The yellow-bellied sapsucker drills small holes in rings around my trunk to feed on the sap and insects. Many birds build nests in my branches and some songbirds use the holes in my trunk for a cavity-nest. Some birds like the pileated woodpecker, brown creeper, and hairy woodpecker forage for insects that live on me. I am host for the caterpillar stage of the cecropia silk moth and the rosy maple moth. Honey bees (*Apis mellifera*) love my pollen and help pollinate my flowers.

Native peoples used many parts to make medicines. They taught the colonists how to make maple syrup and sugar from the sap of the sugar maple. They also used the bark to make a beverage. My sap was used to make vinegar and used as sugar for cooking. Modern people use my wood to make furniture, paddles, torch handles, oars, bowls, cooking utensils, flooring, boxes, and crates, and as a veneer over other woods.

Fun Facts: People recognize my distinctive rounded leaves, which differ from the sharp pointy leaves of the red maple. They also recognize my smooth bark when I am young and my shaggy bark as I age. People love me and my sweet sap. I am Canada's national tree, and my leaf is on that country's flag. I am the state tree of New York and West Virginia.

- People collect my sap, which flows heavily in the spring, and use it to make maple syrup or maple milk. After all, I can produce between 10 to 20 gallons per season. But if you prune me, wait until the summer (July or August) because I will heal (seal) quicker and am less likely to catch a fungal infection.
- My 3- to 5-inch leaves are opposite on the branch and have five lobes with three large, main lobes and one smaller lobe on either side. Each of my lobes have sharp teeth and are connected by shallow, U-shaped notches. My leaves are rounded at the base. The leaves are dark green on the outside and lighter green on the underside and turn beautiful orange, yellow, or red in the fall.
- My flowers are a light yellow-green and are very small. They hang in clusters at the end of a long dangling flower stalk.
- My fruit looks like a thin V-shaped winged spinner and each spinner contains a seed. I bet you and your friends call them 'helicopters.'
- I can grow 60 to 75 feet tall and 40 to 50 feet wide at a rate of about 1 to 2 feet per year. I only bear seeds when I get to be 30 to 40 years old. So, if you see seeds on me, you know that I am a teenager tree because I can live up to 400 years.

Read More:

Sugar maple, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=2>

Acer saccharum, North Carolina State, <https://plants.ces.ncsu.edu/plants/acer-saccharum/>



Mockernut Hickory

Carya tomentosa



Say it like a botanist: KAIR-yuh toh-men-TOH-suh

Member of the walnut family, Juglandaceae

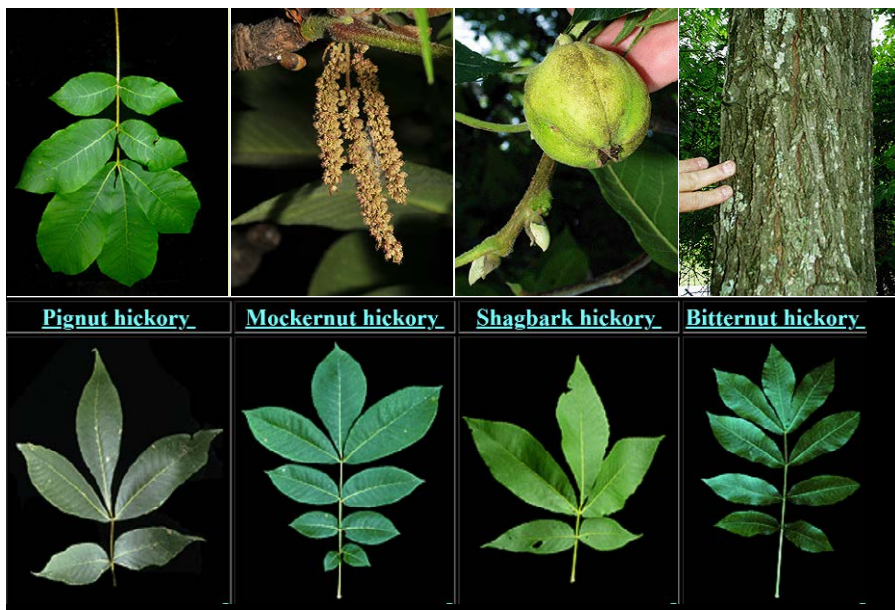
People also call me Big-Bud Hickory, White Hickory, White Heart Hickory

Wildlife like squirrels, chipmunks eat my nuts. Chickadees and woodpeckers like to make houses in my trunk. Lots of butterflies and moths use me to feed their larvae, including the banded hairstreak caterpillar, and luna moth, and hickory horn devil. Humans can eat my nuts, but my shell is hard to crack open.

Native peoples ate my nuts and crushed them to make a mush used as a medicine, to thicken venison broth, and to make the fermented drink called, powcohiccora. Native people used my wood to make archery bows and frames for birch bark canoes. My wood is used to make rungs for ladders, furniture, athletic and gymnasium apparatus, and other useful goods.

Fun Facts:

- My compound leaves alternate on the branch and reach 9 to 20 inches long. My dark yellowish green leaves are made up of seven to nine ovate leaflets attached to a main stem. Each of my leaflets can grow to 3 to 6 inches long and 1 to 3 inches wide and have teeth on the margins. The underside of my leaflets has orange-brown hairs. My leaves turn yellow in fall.
- You might not see my flowers when they bloom in April and May because they are not showy. My male flowers are yellow-green catkins on a 6-inch stalk.
- My bark appears smooth with rounded ridges and shallow furrows.
- You might see my fruit lying on the ground. It will look like an oval four-segmented husk. My fruit starts off a green and turns yellow and then brown as it matures. If you open my husk shell, you will see four segments. Opening my husk is worth the effort because my meat is sweet and edible.
- I am a tall, straight tree. I typically grow 60 to 80 feet tall but can reach up to 100 feet. My rounded canopy spreads to 40 to 60 feet wide if I am not in a forest.
- You might see other hickory trees. Our leaves are a little different.



Read More:

Mockernut Hickory, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=22>

Carya tomentosa, North Carolina State, <https://plants.ces.ncsu.edu/plants/carya-tomentosa/common-name/mockernut-hickory/>

Carya tomentosa (Big-bud Hickory, Mockernut Hickory, Squarenut, White Heart Hickory, White Hickory) | North Carolina Extension Gardener Plant Toolbox (ncsu.edu)

Hickory (*Carya* species), Native Tech, <http://www.nativetech.org/plantgath/hickory.htm>

Oak Trees

There are many species of oak trees. This guide covers the red oak, white oak, and willow oak because these are common in our Northern Virginia woods. However, Virginia does have other oaks. You can tell the difference between oak trees by looking at their leaves and acorns.

Northern Red Oak
(*Quercus rubra*)



Black Oak
(*Quercus velutina*)



Pin Oak
(*Quercus palustris*)



Southern Red Oak
(*Quercus falcata*)



White Oak
(*Quercus alba*)



Post Oak
(*Quercus stellata*)



Willow Oak
(*Quercus phellos*)



Northern Red Oak

Quercus rubra



Say it like a botanist: KWER-kus RUBE-ruh

Member of the beech family, Fagaceae

People also call me Red Oak, Eastern Red Oak

Wildlife loves my acorns. My acorns are higher in fat, protein, calories, and fiber than acorns from white oaks. Squirrels and lots of songbirds love to eat my acorns as do lots of wildlife. Songbirds that find my acorns an important food include wild turkeys, bobwhites, red-headed woodpeckers, red-bellied woodpeckers, blue jays, tufted titmice, common grackles, white-breasted nuthatches, sapsuckers, ruffed grouse, and many species of waterfowl. Deer and other wildlife do not like the bitter taste of my acorns and their poor digestibility.

Native peoples used me to make medicines. Some tribes used my bark as medicine for heart troubles and bronchial infections. Some of my tree was used to make a disinfectant and cleanser. Colonial people used my wood to make furniture, houses, and lots of other things. At the lumber store my wood is called red oak.

Fun Facts: People recognize me by the spikey bristles on my lobed leaves and my dark bark that looks like ski tracks. In fall people can tell me from other oaks by my acorns and red leaf color.

- I am medium tall but have a short dark trunk with lots of branches.
- My simple leaves alternate on branches and have seven to 11 lobes. There is a sharp bristle at the end of each of my lobes. My leaves turn red in early fall before they fall off. They regrow in spring (deciduous).
- In the fall I have acorns that look like they are attached directly to the branch. My acorns have a flat cap that covers $\frac{1}{4}$ to $\frac{1}{2}$ of my brown nut.
- When I am young my bark is smooth, and I grow 2 feet a year. As I get older my dark bark forms ridges that look like ski tracks.
- I like full sun and will grow in lots of different soils, but moist well drained loamy soils are my favorite.
- In the forest you will find me on the north or east side of hills.



Read More:

Red Oak, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=38>
Quercus rubra, North Carolina State, <https://plants.ces.ncsu.edu/plants/quercus-rubra/>

White Oak

Quercus alba



Say it like a botanist: KWER-kus AL-ba

Member of the beech family, Fagaceae

Wildlife loves my acorns. My acorns are one of the best sources of food for birds, squirrels, deer, and other wildlife. In fact, deer love to nibble all my parts. Some birds love to eat my new leaf buds.

Native peoples used me to make medicines. Colonial and modern people use my wood to make wooden barrels, furniture, and wood flooring. Did you know my wood is famous? My wood was used to build the famous ship USS Constitution (Old Ironsides) and used to make keels in other boats.

Fun Facts: People recognize me by the loose block on my bark and by my rounded lobed leaves that stay on my branches during winter.

- I am a medium tall tree that can grow in full sun to part shade to reach 60 to 80 feet tall. I have a short trunk that supports branches so that my canopy can spread 50 - 80 feet wide. I can live to be 300 to 600 years old.
- I grow acorns every year AFTER I get to be 25 years old! So, if you see me with acorns, you know that I am at least 25 years old. My acorns look like light brown, oblong nuts with light gray caps attached to a branch with a 1 ¼ in (3.2 cm) stub.
- My leaves alternate on the branch. My 4 to 7-inch simple leaves have 7 to 10 rounded, finger-like lobes. In fall my green leaves turn a brownish red and stay on my branches during the winter.
- My trunk is distinctive because it looks whitish or ashy gray and appears to have loose scales or irregularly shaped blocks with smooth patches.



Read More:

Field Guide to Native Oak Species of North America, US Forestry Service, <https://www.fs.fed.us/foresthealth/technology/pdfs/fieldguide.pdf>

White Oak, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=35>

Willow Oak

Quercus phellos



Say it like a botanist: KWER-kus FEL-ohs

Member of the beech family, Fagaceae

Wildlife loves my acorns as food, including such birds as wood duck, wild turkey, white-breasted nuthatch, blue jay, red-headed woodpecker, red-bellied woodpecker, and tufted titmouse. Mammals that feed on my acorns include gray and fox squirrels and white-footed mouse. Hundreds of insects feed on my leaves, sap, and wood, including aphids, leafhoppers, treehoppers, lace bugs, plant bugs, leaf beetles, weevils, larvae of long-horned beetles, gall wasps, walkingsticks, and caterpillars of moths, butterflies, and skippers. Willow oak is a preferred host of insects called leafhoppers (*Eratoneura* sp.).

Native peoples used my bark to make medicines including a healing tea. My wood is used to smoke meat. My wood is durable, somewhat soft, finely grained, and pale reddish brown. I am used to make paper pulp, lumber for general construction, church pews, bar tops, railings, stairways, cabinetry, furniture, interior trim, flooring, and veneer.

Fun Facts: People recognize me by my long, narrow unlobed leaves that are 5-8 times as long as they are across. When I am young, I have a pyramidal shape that turns into a rounded canopy with lower branches drooping toward the ground as I get older.

- I am related to the red oak, but my leaves look very different. My simple, thick green leaves alternate on branches. They are long and narrow (2 to 5 inches long, 1 inch wide), gradually tapering at both ends with smooth edges and a bristle at the tip. In fall my leaves turn a non-showy pale yellow.
- My bark is reddish -brown when I am young, but as I get older it turns a grey-brown and has chunky-scaly, or with irregular fissures. Older trees may have shallow furrows.
- My fruit are tiny acorns that are nearly round and yellow-green when young and tan when older. My acorn caps are thin, saucer-like, and flat and only cover 1/4 of my nut. Even though I grow fast, I cannot make acorns until I am 15 to 20 years old. I can live to be over 100 years old and 50 to 90 feet tall with a trunk 2 to 3 1/2 feet around.
- I have both male and female flowers. My male flowers hang in drooping yellowish catkins; my tiny female flowers are three lobed, hairy, and hard to see.
- I don't have a deep tap root like some other oak trees. I grow fast, and my fibrous roots spread out. This makes me easy to transplant.

Read More:

Willow oak, Virginia Tech Dendrology,
<https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=75>

Quercus phellos, North Carolina State,
<https://plants.ces.ncsu.edu/plants/quer-cus-phellos/>

Willow oak, Missouri Dept of Conservation,
<https://mdc.mo.gov/discover-nature/field-guide/willow-oak>



Pawpaw

Asimina triloba



Say it like a botanist: ah-SIH-min-ah trih-LO-bah

Member of the custard apple family, Annonaceae

People also call me Hoosier banana

Wildlife love my flowers and fruit. Butterflies, squirrels, fox, songbirds, flies, and beetles are attracted to my flowers and my fruit. The larvae of the zebra swallowtail butterfly depend upon my flower nectar. Deer do not like to eat my fruit.

Native peoples loved to eat my nutritious fruit. Historians found notes written in 1541 that the native people in the Mississippi Valley shared pawpaw fruit with the Spanish conquistadors. Early settlers to North America made jelly from the fruit. My inner bark was used by native peoples in Louisiana to make a fiber cloth and others used it to string fish.

Fun Facts: I am related to some tropical fruit crops, the cherimoya, guanabana, and soursop, but I am the only member of my family that grows in temperate zones like the US. My fruit is a source of vitamins A and C, and is high in unsaturated fats, proteins, and carbohydrates. Modern scientists discovered my fruit contains more potassium, phosphorus, magnesium, and sulfur than apples, grapes, or peaches. But my fruit is delicate and perishable. My fruit is best eaten within about two days after the fruit is ripe.

- My purplish-brown flowers have 6 petals and smell foul to humans but are designed to attract my preferred pollinators--flies and beetles. I flower just before or at the same time as my leaves emerge.
- My simple green leaves are oblong and 5 to 11-inches long. They alternate on my branches. If you crush my leaf, it smells like a green pepper. My leaves turn yellow in the fall.
- As my green fruit ripens, it turns yellow and then gets brown freckles or blotches when it matures in August to October. It looks like a mango and tastes like a banana custard. Some people get a skin rash and irritation from handling my fruit and leaves, so it's best to wear garden gloves.
- I grow between 15 and 30 feet tall in a pyramid shape and 15 to 30 feet wide. I need to have another pawpaw (a genetically different tree) within a short distance to set fruit.
- I tend to send out suckers to form a small cluster. My suckers should be pruned away so I can grow strong.



Read More:

Pawpaw, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=155>

Asimina triloba, North Carolina State, <https://plants.ces.ncsu.edu/plants/asimina-triloba/>

Growing pawpaw, Purdue University, <https://ag.purdue.edu/hla/pubs/HO/HO-220.pdf>

River Birch

Betula nigra



Say it like a botanist: BET-yoo-luh NY-gruh

Member of the birch family, *Betula*

People also call me Red birch, Water birch

Wildlife love to eat me as food. Deer and other browsers eat my twigs and leaves. A wide range of songbirds eat my small but plentiful seeds. Many waterfowl use me to hide their nesting sites. The caterpillar stage of the mourning cloak butterfly, luna moth, and cecropia moth eat my leaves.

Native peoples harvested my twigs and red inner bark to make a tea high in vitamin C. They ground my inner bark to make flour. In early spring native peoples would collect my sap to make a sweetener like maple syrup. When native peoples used birch trees, they offer gifts to honor it and the legend of Winabojo and the birch tree. Pioneers used my wood to make ox yokes, wooden shoes, and other products for use around the farm. Loggers did not like my wood because it was too knotty and spindly. Some people found they could make birch beer by fermenting my sap. People liked to let me grow along the riverbank to control erosion.

Fun Facts: People recognize me by my year-round papery, peeling bark that provides winter interest.

- My simple, ovate, or egg-shaped leaves have double serrated margins, and my leaves come to a point. You can see my 7-9 veins if you look on the underside of my leaf. On my branch my leaves are arranged alternately.
- My bark is salmon to rust-colored and smooth on young trees; but as I age, it develops flat scaly ridges and papery scales that can peel away.
- My flowers are actually small brown and green and called catkins that appear in April and May. After the catkins mature, they produce lots of tiny nutlets, my fruit, in May and June.
- I grow very fast and add between 13” to more than 24” to my height each year. I grow to a height of 40–60 feet but have a shorter lifespan (50–75 years) than other trees.
- Below are pictures of the leaves from other members of the birch family



Read More:

River birch, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/fact-sheet.cfm?ID=13>

Betula nigra, North Carolina State, <https://plants.ces.ncsu.edu/plants/betula-nigra/>

Birch (Betula species), Native Tech, <http://www.nativetech.org/plantgath/birch.htm>



Sassafras

Sassafras albidum



Say it like a botanist: SAS-ah-fras AL-bih-dum

Member of the Laurel family, Lauraceae

Wildlife of all kinds love to eat my fruit. You might see Eastern bluebirds, mockingbirds, sapsuckers, and woodpeckers nibbling my seeds. Deer like to eat my twigs and foliage. Squirrels eat my bark. I host the larval stage of several moths (Imperial moth) and the beautiful black spicebush swallowtail butterfly which is so distinctive with the bright blue on its lower wings.

Native peoples extracted oil from my sap and used it for medicine. My leaves and their oils were used in soaps and fragrances. My wood was used to make furniture and sometimes boats.

Fun Facts: People recognize me by my distinctive leaves in three forms: unlobed, two-lobed like a mitten, or three-lobed resembling a dinosaur toe. I can't make up my mind which is best so sometimes all three forms of my leaves appear on the same branch. (Just to drive you crazy!) If you crush my leaf, it is fragrant.

- My small flowers are a bright yellow-green in spring and hang down on short stalks (racemes).
- My shiny blue fleshy fruit (drupe) is at the end of a red cup and a red stalk. You can't miss it!
- My brown bark is often twisted and is ridged and furrowed. When cut it releases a spicy aroma.
- I am a medium tree and can grow up to 60 feet tall. Because my roots grow suckers, you might find me in thickets.



Read More:

Sassafras, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=84>
American beech, North Carolina State, <https://plants.ces.ncsu.edu/plants/fagus-grandifolia/common-name/american-beech/>

Photo: Spicebush Swallowtail, Greg Hume, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=17707578>

Sweetbay Magnolia

Magnolia virginiana



Say it like a botanist: mag-NO-lee-ah ver-jin-ee-AY-nah

Member of the Magnolia family, Magnoliaceae

People also call me Swamp Magnolia, Laurel Magnolia

Wildlife, including birds and other small mammals, enjoy eating my seeds.

Native peoples (Houma and Rappahannock tribes) used my leaves, twigs, and bark for medicine.

Fun Facts: I am an attractive, small, multi-stemmed tree with an open, spreading habit. I grow to 12 to 20 feet tall and wide. People recognize me by my evergreen leaves that appear silver underneath and by my beautiful white flowers in summer.

- I have beautiful, fragrant, creamy white flowers in the late spring and summer.
- My 3 to 5-inch spear-shaped leaves are shiny and dark green on top and a silvery color underneath. They are evergreen and do not change color in the fall. In the south the leaves may not even fall from the tree. My leaves have a spicy smell when you crush them.
- I have pretty cone-like fruit, about 2 inches long, with bright red seeds in the late summer and fall. My seeds are a great food source for birds and small mammals.
- In the wild, I grow in moist areas in the Eastern United States, from New York to Florida. In fact, I am the only magnolia that can handle wet soil.
- Other Magnolias include the native, southern magnolia, *Magnolia grandiflora*.



Read More:

Sweetbay magnolia. Virginia Tech, <http://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=334>
Magnolia virginiana, North Carolina State, <https://plants.ces.ncsu.edu/plants/magnolia-virginiana/>

Tulip Poplar

Liriodendron tulipifera



Say it like a botanist: leer-ee-oh-DEN-dron too-lip-ih-FER-ah

Member of the Magnolia family

People also call me Tulip Tree or Yellow Poplar

Wildlife loves me. Bees, butterflies, and ruby-throated hummingbirds love the nectar from my orange and yellow-green flowers. Squirrels and songbirds love to eat my seeds. The eastern tiger swallowtail and many species of moths depend on me for shelter and food (host plant).

Native peoples used my tall straight trunks to make dugout canoes. Other people use my wood to make furniture, musical instruments, and other things. At the lumber store my wood is called yellow poplar. Historians report that Daniel Boone used my trunk to make a 60 foot dugout canoe. If you go to Mount Vernon, you might see the tulip trees planted by George Washington--look for them, they are really tall (over 140 feet).

Fun Facts: People recognize me by my tulip-shaped leaves, my yellow and orange flowers in the spring, and my tall, tall height.

- I am tall and straight. When you see me, I am one of the tallest trees because I can grow to over 100 feet (up to 200 feet) tall.
- My leaves are simple with four lobes with a smooth edge margin. My leaves alternate on the branch. The veins in my leaves look like your hand—they are palmately, veined. My leaves turn yellow and fall off in early fall. They regrow in spring (deciduous)
- My flowers look like tulips with petals that are yellow green and orange.
- My bark is smooth and dark. My wood is soft and sometimes my limbs break in high winds or in ice and snow. As I grow up my bark gets wide furrows and flat ridges. I can grow very wide 8 to 20 feet at my base. I have a pyramid shaped crown.
- I grow best in full sun.



Read More:

Tulip poplar, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=54>
Liriodendron tulipifera, North Carolina State, <https://plants.ces.ncsu.edu/plants/liriodendron-tulipifera/>

Witch Hazel

Hamamelis virginiana



Say it like a botanist: ham-ah-MAY-lis ver-jin-ee-AY-nah

Member of the witch hazel family, Hamamelidaceae

People also call me Southern Witch Hazel, Winterbloom, Common Witch Hazel, American Witch Hazel

Birds and small mammals love to eat my fruit. My flowers are pollinated by noctuid moths, commonly called owlet moths. Deer like to browse on my leaves. Because I flower when few other flowers are blooming, I attract lots of bugs to my nectar along with birds who eat the bugs.

Native peoples used my bark, leaves and twigs to make medicines and treat cuts or insect bites. They also used my bendable forked branches to search for water or minerals.

Fun Facts: My name comes from the Old/Middle English word *wiche*, which means bendable. People recognize me by my wispy yellow flowers in the fall and winter. My scientific name comes from the Greek words *hama* for same time and *melon* for apple/fruit. I got this name because my flowers and fruits appear at the same time.

- My leaves are ovate simple and alternate on the branch. My leaf margin looks wavy and has broad teeth (dentate). My leaves are green and can also be yellow in the fall and last a long time on my branches.
- My distinctive fragrant flowers are yellow with four crinkly, ribbon shape petals that some people call spidery. My flowers hug the stem and come out after my leaves drop. I bloom in the fall (October to December) when few other things are blooming. Some people say that when I flower, I look like I have a crazy hair style!
- My fruit looks like pods that start green and mature to look brown and woody. Each pod contains two black seeds. In the fall my pods split open and shoot my shiny black seeds out as far as 30 feet! How far can you spit out a pumpkin seed?
- I am a small tree, growing only to about 15 or 20 feet tall, but you will often see me growing in multi-stemmed clumps with my branches arching over the landscape.
- I can be pruned to keep my wild form under control. But if you do, please prune me in the spring after I finish blooming.






Read More:

Witch hazel, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=50>
Hamamelis virginiana, North Carolina State, <https://plants.ces.ncsu.edu/plants/hamamelis-virginiana/>
Witch Hazel, Native Tech, <http://www.nativetech.org/plantgath/witchhaz.htm>

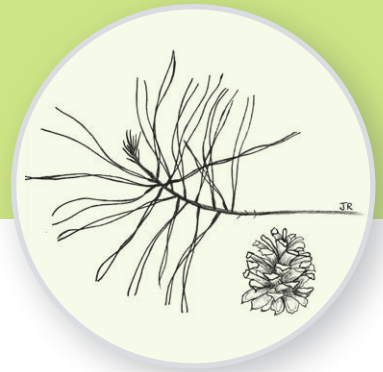
Trees with Needles

Table 5. Identifying Trees with Needles

Needle Like, Long, Slender	
Needles Appear in Clusters (Pines)	Single Needles, Not in Clusters
How many needles are in the cluster (fascicle)?	How are the leaves attached to the twig?
 <p>Two Needles per Cluster:</p> <ul style="list-style-type: none"> • Virginia Pine (<i>Pinus virginiana</i>) • Shortleaf Pine (<i>Pinus echinate</i>) • Red Pine, Table Mountain Pine • and more 	<p>With Suction Cup (Firs)</p> <p>Soft, flat, needles attached directly to branch, looks like suction cup; narrow cones are cylindrical and upright or horizontal</p> <ul style="list-style-type: none"> • Balsam Fir (<i>Abies balsamea</i>) • Fraser Fir (<i>Abies fraseri</i>) 
 <p>Three Needles per Cluster:</p> <ul style="list-style-type: none"> • Loblolly Pine (<i>Pinus taeda</i>) • Shortleaf Pine (<i>Pinus echinate</i>) • Longleaf Pine (<i>Pinus palustris</i>) • And more 	
 <p>Two and Three Needles per Cluster:</p> <ul style="list-style-type: none"> • Shortleaf Pine (<i>Pinus echinate</i>) 	<p>With Woody Pegs (Spruce)</p> <p>Sharp-pointed needles often four-sided or diamond shape, with four whitish stripes; whorled equally around branch (looks like bristly brush); cones grow downturned</p> <ul style="list-style-type: none"> • Norway Spruce (<i>Picea abies</i>) • Red Spruce (<i>Picea rubens</i>) 
 <p>Four Needles per Cluster:</p> <ul style="list-style-type: none"> • Loblolly Pine (<i>Pinus taeda</i>) 	
 <p>Five Needles per Cluster:</p> <ul style="list-style-type: none"> • Eastern White Pine (<i>Pinus strobus</i>) 	<p>With Tiny Leaf Stalks (petioles) (Hemlock & Cypress)</p> <p>Shape, size, and growth of cone are needed to identify tree</p> <ul style="list-style-type: none"> • Eastern Hemlock (<i>Tsuga canadensis</i>) • Carolina Hemlock (<i>Tsuga caroliniana</i>) • Bald Cypress (<i>Taxodium distichum</i>) • Pond Cypress (<i>Taxodium ascendens</i>) • European Larch (<i>Larix decidua</i>) 

Virginia Pine

Pinus virginiana



Say it like a botanist: PY-nus vir-jin-ee-AN-uh

Member of the pine family, Pinaceae

People also call me Scrub Pine

Birds and small mammals love to eat my seeds.

Native peoples chewed my resin for sore throats. The Chippewa people shape my needles into little dolls. People don't use my wood for lumber because it has lots of knots and tends to warp with moisture. People use my wood for wood pulp. Cherokee people use me in some rituals such as burning my branches during the burial ritual. Some native peoples used my needles as a soap and my sap as a tar.

Fun Facts: People recognize me because I am a pine tree but do not have a central leader that makes me look scraggly unless I am pruned. My cones are small and stay on my branches a long time. My needles are in clusters of two.

- I am an evergreen that grows into a pyramidal form between 15 and 40 tall and 10 to 30 feet wide.
- I usually grow in full sun and well-drained soil and in the wild I like to grow with other Virginia pine trees.
- My oblong cones are reddish-brown on short stalks and have spiny scales. My cones stay on the tree for a long time (years). The seeds in my cones ripen after two years.
- My leaves are 1.5 to 3-inch needles in clusters of two.
- My bark is orange-brown and scaly looking. As I grow up my scales look like small plates.



Read More:

Virginia Pine, North Carolina State, <https://plants.ces.ncsu.edu/plants/pinus-virginiana/common-name/virginia-pine/>

Virginia pine, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/sylla>

Pine (Pinus species), Native Tech, <http://www.nativetech.org/plantgath/pine.htm>

Poison Ivy

Toxicodendron radicans

Say it like a botanist: toks-ee-ko-DEN-dron RAD-ee-kans

Member of the cashew family, Anacardiaceae

Leaflets of three—let me be. You should not touch me.

Wildlife loves me. Songbirds and woodpeckers eat my berries. Deer and rabbits eat my leaves. Snakes and frogs like to shelter under my leaves. Insects, beetles, flies, bees, wasps, ants, and butterflies love my flowers for its nectar.

Fun Facts:

- I am a native plant and I grow almost everywhere. I can be a shrub but more often I am a woody vine that can grow up trees, rock walls, and other structures. You may see my green or reddish-brown stems. I send out hairy rootlets along my stem so I can cling and climb trees, fences, walls, and other things.
- All my parts (leaflets, vine, roots) contain an oil called urushiol (say it, yr·OO·shee·aal). My young leaflets, leaves, and bark contain the highest amount of this toxic oil.
- When you touch any of my parts, urushiol will penetrate your skin, and your skin might break out into red itchy bumps that last a long time. If you want to walk through areas where I live, it is best if you wear long pants and long-sleeved shirt.
- My shiny green leaves are compound and always alternate on my vine. I usually have three leaflets on a stalk. The middle leaflet is always on a longer stalk, the other two attach directly to the vine and are always opposite each other. I sometimes hide my identity with leaflets that occasionally appear in groups of 5 or 7 or even 9.
- My glossy leaflets can be smooth with rounded edges with pointy tips. My edges can be jagged and appear shallow lobed. My stems are reddish and woody. In the fall, my leaves turn red or reddish yellow. I have white berries in spring.
- Poison ivy never has thorns. It never has a square back leaf.
- If you think you touched me, wash off the urushiol using running water within about 10 minutes after contact using colloidal oatmeal, dish soap, or rubbing alcohol. Don't use a soap that contains an emollient, chemicals that soften dry skin, because they will only spread my urushiol and enlarge the itchy area. The garden center sells special soaps and other products that prevents the spread of urushiol on your skin, clothes, and tools. Urushiol will stay a long time on your clothes, tools, and even your dog's hair. So you'll need to wash the urushiol off all of these.

Take a Poison Ivy Identification quiz at: <https://www.poison-ivy.org/poison-ivy-quiz>

Read More:

Poison ivy, University of Maryland, <https://extension.umd.edu/resource/poison-ivy>

Recognizing Poison Ivy, Oak and Sumac, Children's Hospital of Philadelphia



Autumn Olive and Russian Olive (*Invasive*)

Elaeagnus umbellata and *E. angustifolia*

Say them like a botanist: el-ee-AG-nus um-bell-AY-tuh and el-ee-AG-nus an-gus-tee-FOH-lee-uh

Members of the Oleaster family, Elaeagnaceae

People also call me Japanese Silverberry, Spreading Oleaster, Russian Olive

Birds enjoy my fruit which contain high amounts of the natural chemical, lycopene, which gives fruit a red color and protects cells from damage. Bees love the nectar from my flowers.

In the 1800s, we were introduced into the United States from Asia to help with erosion control and as an ornamental plant.

Fun Facts: I have sharp thorns and grow into a shrub or small tree up to 40 feet tall. I am a bully because I outcompete native plants and interfere with nutrients in the soil.

- Autumn olive has simple, long lanceolate, dark green leaves with wavy margins that alternate on the branch. Russian olive has silver-gray or gray-green leaves.
- Our flowers are fragrant, and bell shaped, and our small berries are silvery reddish brown in the late summer.
- The state of Virginia considers Autumn olive a highly invasive plant and encourages you to remove me from your yard.



Autumn olive

Russian olive

Read More:

Autumn-olive, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=269>

Elaeagnus umbellata, North Carolina State, <https://plants.ces.ncsu.edu/plants/elaegnus-umbellata/>

Russian-olive, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=120>

Burning Bush or Winged Euonymus (*Invasive*)

Euonymus alatus

Say it like a botanist: yoo-ON-ih-mus a-LAY-tus

Member of the bittersweet family, Celastraceae. Most members of this family are tropical, but *Euonymus* (the spindles) grow in temperate climates.

People call me: Burning bush, Corky spindle tree, Winged spindle tree

Wildlife and birds eat my seeds. Lots of different beetles make their home in me.

Some cultures used the wood to make spindles for spinning wool

Fun Facts: I am known for bright red color in fall (if I am grown in sun). This is how I got my name, burning bush. I am native to China, Japan, and Korea. Even though I have been awarded the Royal Horticultural Society's Award of Garden Merit, in Virginia I am regarded as an invasive plant.

- My simple ovoid leaves have teeth and are opposite on my woody stem.
- I can grow 15 to 20 feet tall and 15 to 20 feet wide, but I can be trimmed into a dense hedge. My seeds spread, and I grow into a multi-trunked plant.
- My bark is gray or brownish gray and slightly furrowed. My greenish brown woody stems appear to have corky wings.
- My small greenish-reddish flowers are not very showy, and you are likely to miss seeing them.
- My small red fruit are eaten by birds, who spread my seeds. Don't eat my seeds, they are poisonous to humans.



Read More:

Winged euonymus, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=282>
Euonymus alatus, North Carolina State, <https://plants.ces.ncsu.edu/plants/euonymus-alatus/>

Bush Honeysuckles (*Invasive*)

Lonicera spp.

Say it like a botanist: loh-NIS-er-a

Member of the honeysuckle family, Caprifoliaceae

People also call me Amur honeysuckle, Morrow's honeysuckle, Belle's honeysuckle, Fragrant honeysuckle and more.




Birds like the fruit and spread the seeds.

Fun Facts: Bush honeysuckles in the genus *Lonicera* grow in northern latitudes in Europe, Asia, and North America. They were brought to the United States in the mid-1880s. Our genus name, *Lonicera*, is for a German botanist, Adam Lonicer, who lived from 1528 to 1586.

In Virginia, the only native bush honeysuckle, *Lonicera canadensis*, is called American fly honeysuckle, and it lives in high mountain terrain in western Virginia. So, it is highly likely that all bush honeysuckles you see in your Northern VA neighborhoods are one of the invasive honeysuckles.

- As a group, we bush honeysuckles grow upright as multi-stemmed shrubs about 6 to 16 feet tall with arching branches.
- We all have simple oval or oblong green leaves with smooth margins. Our leaves appear opposite on the branch.
- In spring we grow white or yellow flowers and in late summer, our berries begin as round green before turning into juicy red or dark berries.
- Our bark is grayish brown and has long deep fissures with scaly ridges.

Can you tell the invasive honeysuckles from our native honeysuckle?

Invasive Bush Honeysuckle	Highly Invasive Vine Honeysuckles	Native American Fly Honeysuckle
Round, red, or dark berries Multi-stemmed shrubs grow 6 to 16 feet tall	Dark, round berries appear in pairs on stem Twining vine grows over plants and smothers them.	Reddish orange berries appear opposite each other and have a tapered point Shrub grows to about 3 feet tall. Bark is reddish gray and looks like it's peeling or shredding
		

Read More:

Bush Honeysuckles, Invasive Alien Plant Species, <http://dcr.virginia.gov/natural-heritage/document/fslobe.pdf>

Amur honeysuckle, Virginia Tech Dendrology, <https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=268>

Lonicera maackii, North Carolina State, <https://plants.ces.ncsu.edu/plants/lonicera-maackii/>

Tree-of-Heaven (*Invasive*)

Ailanthus altissima

Say it like a botanist: ay-LAN-thus al-TISS-ih-muh

Member of a big family of tropical trees and shrubs, Simaroubaceae

People also call me Chinese sumac, Stinking sumac

Some gardeners call me a bully because I grow fast and rob sun, space, and nutrients from native plants. I grow fast, about 3 to 6 feet a year when I am young. I outcompete native plants, so they don't get enough sunlight or space to grow. If my leaves are left on the ground, they degrade into toxins so other plants do not grow around me.

Wildlife: I am host to the spotted lanternfly for all phases of its life cycle. The spotted lanternfly is an invasive pest that is attacking and feeding on Virginia's crops including grapes, apples, and a lot of native trees, including oak, walnut, poplar, and pine.

I am ranked HIGH on Virginia's List of Invasive Plant Species.

Fun Facts: Tree-of-Heaven was brought first into the United States in 1784. Later I was imported by Chinese immigrants, who made medicine from my parts.

- I am a fast-growing tree to 70 feet tall or taller and I will grow in all types of soil and light.
- My compound leaves are long, 18 to 36 inches and have between 11 and 41 leaflets. Each of my leaflets are 2 to 6 inches long with a pointed tip. At the base of each leaflet there are large glandular teeth near the notched base. When crushed, these glandular teeth will give off a foul odor.
- My stems are light brown and when cut or broken will also give off a foul smell.
- My fruit are clusters of flat reddish-brown winged seeds called samara.
- I look like a lot of desired native trees (see the diagram on pg 41). But I really am an invasive bully that should be cut down and killed. But beware: I am hard to kill!






















Read More:

Tree-of-Heaven, Invasive Alien Plant Species of Virginia, Virginia Dept. of Conservation and Recreation, <https://www.dcr.virginia.gov/natural-heritage/document/fsaial.pdf>

Control and Utilizations of the Tree of Heaven, Virginia Dept. of Forestry,

https://www.dof.virginia.gov/wp-content/uploads/Control-and-Utilization-of-Tree-of-Heaven_pub.pdf

Invasive Tree-of-Heaven & Native Look-Alike Identification

Invasive Tree-of-Heaven & Native Look-Alike Identification Photographs				
Tree-of-Heaven <i>Ailanthus altissima</i> (invasive)	Staghorn Sumac <i>Rhus typhina</i> (native)	Winged/Shining Sumac <i>Rhus copallina</i> (native)	Black Walnut <i>Juglans nigra</i> (native)	Butternut <i>Juglans cinerea</i> (native)
				
				
				
				

Prepared by Rachel Brooks (Virginia Tech), Barbara Bailey (VCE-Loudoun), and Beth Sastre (VCE-Loudoun). Photos by: John Seiler, Edward Jensen, Alex Niemiera, and John Peterson; tree-of-heaven leaves photo: Doug Goldman (hosted by the USDA-NRCS PLANTS Database). SPES-148NP

 **Virginia Cooperative Extension**
Virginia Tech • Virginia State University

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnis, Administrator, 1890 Extension Program, Virginia State University, Petersburg.

Source: Invasive Tree-of-Heaven & Native Look-Alike Identification Drawings, Virginia Tech, <https://vtechworks.lib.vt.edu/handle/10919/93162?show=full>

Invasives

Invasive plants are bullies. They can outcompete native plants and cause their decline. Some invasive vines twine into and around trees and shrubs to cause their decline and death. Other invasive plants grow densely to compete and push out desirable plants. Still others use chemical and biological tactics to prohibit the growth of other species.

Porcelain-berry (*Invasive Vine*)

Ampelopsis brevipedunculata

Say it like a botanist: am-pel-OP-sis brev-i-ped-unk-u-LA-ta

A perennial, woody vine with tendrils that can twine around native shrubs and young trees to shade and rob them of sun and nutrients. The heart shaped leaves appear similar to grape vine leaves. Simple, heart-shaped green, lobed leaves grow alternately on a woody vine. Tendrils appear opposite the leaves and never end in adhesive disks. People recognize porcelain-berry by the umbrella-shaped panicle upwardly holding the flowers in spring and then the bright multicolored fruit (blue, green, pink, turquoise, black) in fall. In contrast, grapes hold their flowers and fruit downward. Birds and mammal eat the brightly colored fruit that appears as clusters in fall and disperse seeds. Eating berries are poisonous to humans.

You Ain't from Around here! Exotic Invasive of the Quarter: Porcelain-berry (*Ampelopsis glandulosa* var. *brevipedunculata*), https://forestupdate.frec.vt.edu/content/dam/forestupdate_frec_vt_edu/newsletter/archives/2018/32_2/GagnonPorcelainberry.pdf



Mile-a-Minute or Asiatic Tearthumb

Persicaria perfoliata

Say it like a botanist: : per-se-KAR-e-a

An annual vine with backward-hooked or curved prickles on weak reddish stem. Triangular leaves alternate on vine; leaves might have heart-shaped base. At the base of the leaf there is saucer shaped collar that encircles the stem. It prefers bright sun but will grow in partial shade. This aggressive vine can grow 20 feet in a season to crowd out desired plants. Its fruit is a shiny blue when mature and appears in clusters. This invasive emerges from seeds in spring.

You Ain't From Around Here! Exotic Invasive of the Quarter: Mile a Minute Vine (*Persicaria perfoliata*), https://forestupdate.frec.vt.edu/content/dam/forestupdate_frec_vt_edu/newsletter/archives/2015/29_2/macintyre.pdf

Oriental Bittersweet, Asiatic Bittersweet, Climbing Spindle Berry

Celastrus orbiculatus

Say it like a botanist: sel-ASS-trus or-bik-yoo-LAY-tus

This quick growing deciduous woody vine climbs by twining to smoother neighboring plants. It has simple olive glossy green ovate, toothed (dentate) leaves turn yellow in fall. Leaves have a blunt tip and are attached alternate to the brown or gray stem. The non-showy spring flower turns into a cluster of green capsules that split to show a scarlet, fleshy, berry-like fruit that matures between August and January. The brown stems can reach several inches in diameter. People recognize Oriental Bittersweet by its climbing woody vine that spirals around itself and its showy fruits that grow along the stem (in contrast to the fruit of the native American Bittersweet that grow only at the branch tip).

<https://plants.ces.ncsu.edu/plants/celastrus-orbiculatus/>

<https://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=152>

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ct/technical/ecoscience/invasive/?cid=nrcs142p2_011081



Kudzu

Pueraria montana var. *lobata*

Say it like a botanist: pew-er-RAY-ree-uh mon-TAY-nuh low-BAY-tuh

This climbing perennial woody vine twines around trees, shrubs, and other plants to form a dense mat, suffocating any plant in its path. Recognize it by its leaf with three leaflets, each with hairy pointed tips. Leaves alternate on round, hairy, yellow-green stems. In maturity the stem is dark brown and rigid. Pea-like purple flowers hang in long clusters in June to September. Fruits appear as 1-3-inch green flat pods that are brown and hairy in maturity. Each pod contains 3 to 10 kidney shaped seeds. Kudzu grows rapidly and reproduces by sending out stolons (on top of the ground) and rhizomes (underground) rooting everywhere a leaf node meets the ground.

You Ain't From Around Here: Exotic Invasive of the Quarter: Kudzu (*Pueraria montana* (Lour.) https://forestupdate.frec.vt.edu/content/dam/forestupdate_frec_vt_edu/newsletter/archives/2007/kudzu.pdf

The Virginia Department of Conservation and Recreation publishes the Invasive Plant Species List to inform the public about plants to control and not plant. Below we list a small sample of the most worrisome invasive plants.

Invasive Plant Species List

<https://www.dcr.virginia.gov/natural-heritage/invsppdflist>

Japanese Stiltgrass

Microstegium vimineum

Say it like a botanist: my-kroh-STEEJ-ee-um vim-IN-ee-um

This summer annual weed can grow 3.5 feet and can make a new plant at each node. Leaves are long, narrow with smooth margins (entire). Leaves are alternately arranged on straight green branching stems and the base of the leaf blade is wedge-shaped and slightly hairy. The lower stems might be spreading while the upper stems are erect. Flowers are small and not showy. Fruit has stiff bristles (awn) that are easily attached to fur or distributed by wind. Seeds stay viable for 3 to 5 years. This grass has no food value for grazers. Japanese stiltgrass forms dense fibrous root mats that harbor rodents.

https://forestupdate.frec.vt.edu/content/dam/forestupdate_frec_vt_edu/newsletter/archives/2007/stiltgrass.pdf

<https://plants.ces.ncsu.edu/plants/microstegium-vimineum/>



Multiflora Rose

Rosa multiflora

Say it like a botanist: ROE-zuh mull-tih-FLORE-uh

People notice a rose growing in 10 to 15 feet high thickets. The compound leaf has five to 11 serrated leaflets with pointed tips attached to a stem (petiole) attached alternate to the curved prickles on long green or green-red twig. In early summer, people will notice the fragrance before seeing the clusters of small, white, five-petal flowers. In fall a fleshy fruit, hip, ripens and persists through the winter. Rose lovers can distinguish this invasive from desired roses by the fringed stipules at the base of each leaf. Brambles have purple stems, which distinguish them from this undesired rose.

<http://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=151>

<https://plants.ces.ncsu.edu/plants/rosa-multiflora/>



Japanese Barberry

Berberis thunbergii

Say it like a botanist: ber-BER-is thun-BER-jee-eye

Japanese barberry is a small bush with a rounded crown and simple obovate or spatulate leaves with a smooth margin (entire) and a narrow base. The leaf color is green or red and appear alternate on angular brown stems that have single spines. The stems appear to zig-zag. While people might not notice the pale-yellow flowers in late spring, they will notice the bright, glossy red, ellipsoidal berries in fall that birds love. Scientists note that the presence of dense barberry shrubs is associated with an increased presence of the black-legged tick that transmits Lyme disease.

<https://extension.psu.edu/the-invasive-japanese-barberry>

<http://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?ID=374>

<https://plants.ces.ncsu.edu/plants/berberis-thunbergii/>



European Stinging Nettle

Urtica dioica

European stinging nettle is a perennial weed with hairs and spines on its egg-shaped to lanceolate, toothed, green leaves. The hairs release formic acid, which causes a burning or stinging sensation to skin. Leaves appear opposite on the stem. The stems are unbranched and also has long stinging hairs. Greenish to yellowish flowers appear in cluster between the stem and leaf petioles (leaf axil). The plant releases dry seeds and sends out rhizomes.

<https://weedid.cals.vt.edu/profile/202>





Visit our website at FairfaxGardening.org

**Search YouTube for
Fairfax County Master Gardeners**
for our informational videos.

In cooperation with



Virginia Tech • Virginia State University

2021