

Tree Identification for Beginners

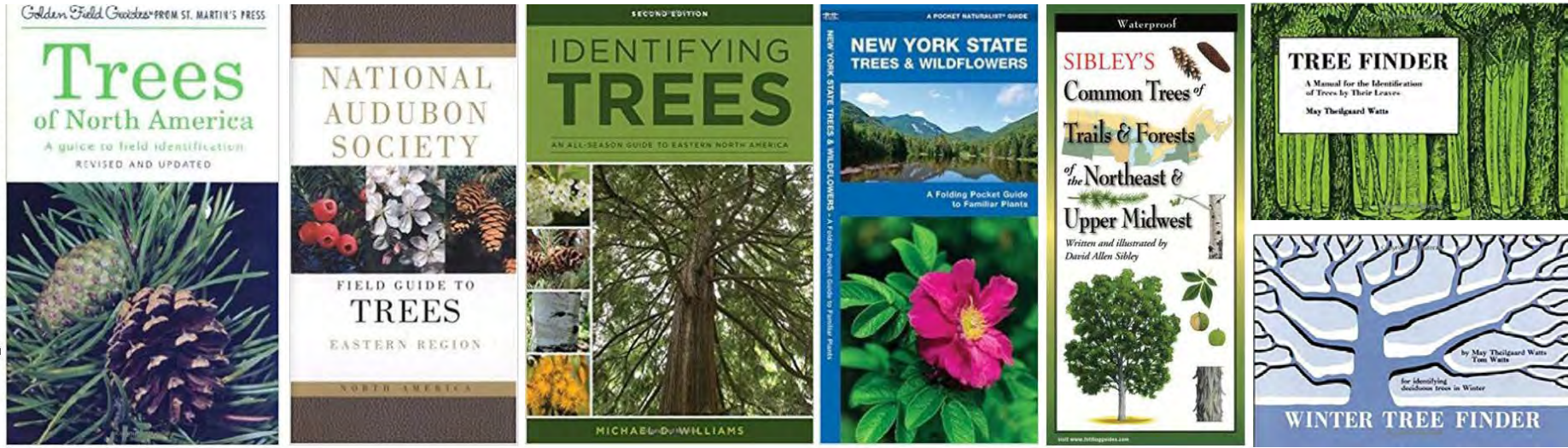


March 23, 2022

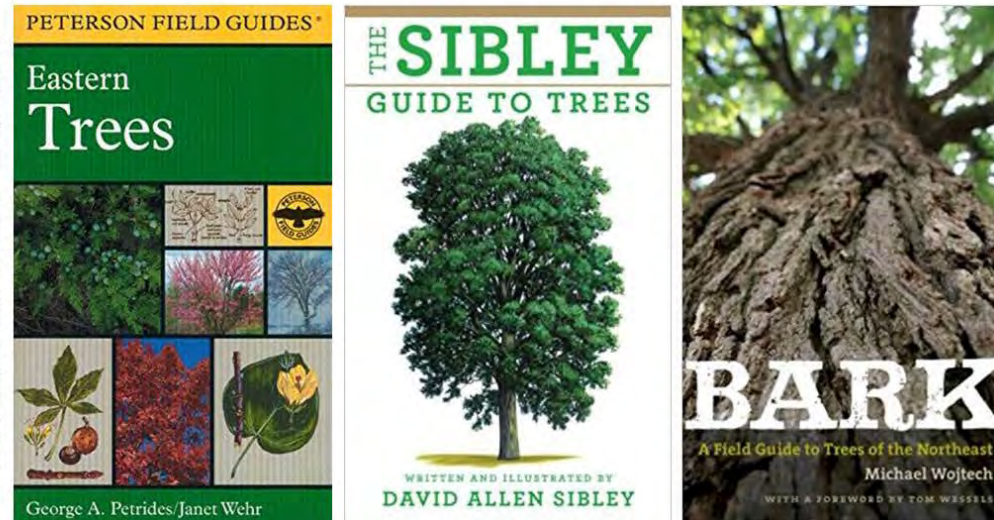
Julie Hart
Director of Education
Dutchess Land Conservancy

Field Guides

Beginner Tree Guides



Advanced Tree Guides



Using A Key



Using A Key

254 *Appendix*

A KEY TO THE WHITE OAK GROUP—Continued.

AA. Leaves not evergreen.
 B. Lining of leaves pale, not downy; lobes finger-like. **WHITE OAK.**
 BB. Lining of leaves pale, downy.
 C. Bark of branches corky-ridged; acorn large, in fringed cup. **BUR OAK.**
 CC. Bark of branches shed in rough flakes; acorns large, on long stalks. **SWAMP WHITE OAK.**
 CCC. Bark of branches not corky-ridged, nor scaly.
 D. Acorn medium-sized; leaf margins cut into squarish lobes. **POST OAK.**
 DD. Acorn large; leaf margins wavy; bark dark brown. **CHESTNUT OAK.**

A KEY TO THE BLACK OAK GROUP

A. Leaves narrow, willow-like; Southern tree. **WILLOW OAK.**
 AA. Leaves oval, with deeply-cleft margins.
 B. Acorn cups shallow, broader than high.
 C. Tree pyramidal, twigs with pin-like spurs. **PIN OAK.**
 CC. Tree spreading; acorns large, in shallow saucers. **RED OAK.**
 BB. Acorn cups as deep as broad.
 C. Leaves thin, smooth, deeply cut; acorn cup drawn in at the top. **SCARLET OAK.**
 CC. Leaves leathery, rough, with rusty hairs beneath; acorn cup not drawn in at the top. **BLACK OAK.**




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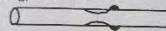


A KEY TO THE ELMS


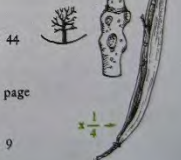
A. Twigs smooth, not hairy-coated.
 B. Bark of branches not corky-ridged. **AMERICAN ELM.**
 BB. Bark of branches corky-ridged. **WINGED ELM. WAHOO.**
 AA. Twigs hairy-coated.
 B. Bark of branches corky. **CORK ELM. ROCK ELM.**
 BB. Bark of branches not corky; buds coarsely hairy. **SLIPPERY ELM.**



A KEY TO THE MAPLES



A. Leaves simple.
 B. Bloom before the leaves open; seeds ripe in May.
 C. Flowers red; leaves pale beneath, with three triangular lobes. **RED MAPLE.**
 CC. Flowers greenish; leaves pale beneath, deeply cleft, with long, spiny lobes. **SILVER MAPLE.**
 BB. Bloom after the leaves open; seeds ripe in autumn.
 C. Leaves wider than long; lobes spiny-tipped.
 D. Lining of leaves, pale; keys joined at acute angle. **SUGAR MAPLE.**
 DD. Lining of leaves, not pale; keys joined at wide angle. **NORWAY MAPLE.**
 CC. Leaves circular, lobed; tree prostrate. **VINE MAPLE.**



If the leaf scars are alternate, that is, if one leaf scar occurs on one side of the twig, with the next one being further along the twig on the other side, like this:  go to  below 



If there are two or more leaf scars opposite each other on the twig, like this:  go to  below 


If the leaf scars are whorled, that is, if there are more than two leaf scars around the twig at the same level, like this:  it is **HARDY CATALPA**
Catalpa speciosa 


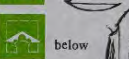
If the leaf scars are not whorled, but come in pairs, each one on the opposite side from another, go to  page 44 


If the entire twig is over 1/4 inch thick, go to  next page 



If the entire twig is not over 1/4 inch thick, go to  page 9 

If the buds are whitish and woolly; and the twigs are purplish or greenish; and the leaf scars from opposite sides of the twig meet at their tips, forming a tooth-like point, it is  **BOX ELDER**
Acer Negundo 

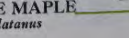
If the buds are not whitish and woolly, go below to 

If the twigs are stout, with end buds making a broad, low triangle, smooth, green or partly green, go to  below 


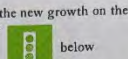
If the buds are longer-pointed, and brown to reddish-brown, go to next page 


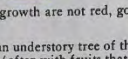
If the buds are marked with green and some red-brown; and the fruits which may still be clinging to the tree are joined in pairs at a wide angle so that they resemble a miniature coat hanger, it is  **NORWAY MAPLE**
Acer platanoides 



(In early spring the tree is conspicuous with clusters of yellow-green flowers. At that time one can easily identify this tree by its milky juice.)


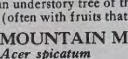
If the end buds are big and green, it is **SYCAMORE MAPLE**
Acer Pseudo-Platanus 


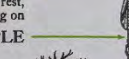
(No milky juice.)



If the buds are red; and the new growth on the twigs is red, or red-brown, go to  below 

If the buds and the new growth are not red, go to  next page 

If the tree is shrub-like, an understory tree of the forest, with densely-hairy twigs (often with fruits that hang on into the winter), it is  **MOUNTAIN MAPLE**
Acer spicatum 

If the tree is not shrub-like, and the flower buds are globular and conspicuous, go to  below 

If the twigs give a rank smell when broken, and the bark on old trunks peels in great shaggy flakes, and the bud scales are pointed, it is  **SILVER MAPLE**
Acer saccharinum 

If the younger trunks are smooth, very pale gray, with darker markings, and if the twigs do not have a rank smell when broken, and if the bud scales are rounded, it is  **RED MAPLE**
Acer rubrum 

Using A Key



KEY BASED ON WINTER CHARACTERISTICS

	PAGE
1. Leaves evergreen. (2)	
1a. Leaves deciduous. (11)	
2. Leaves with broad and flat blades. (3)	
2a. Leaves linear, needle-like, scale-like, or awl-like. (5)	
3. Leaves with spiny-toothed margins	AMERICAN HOLLY (<i>Ilex opaca</i>) 269
3a. Leaves with entire margins. (4)	
4. Leaves 5 or more inches long; large terminal flower buds usually present	
.	GREAT LAUREL (<i>Rhododendron maximum</i>) 314
4a. Leaves 4 inches or less in length	MOUNTAIN LAUREL (<i>Kalmia latifolia</i>) 317
5. Leaves needle-like. (6)	
5a. Leaves other than needle-l.ike. (7)	
6. Leaves in bundles of 2 to 5	PINES (<i>Pinus</i>) 49
6a. Leaves scattered, stiff, more or less 4-sided	SPRUCES (<i>Picea</i>) 69

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Tree Identification for Beginners: Deciduous, Alternate



Tree Identification for Beginners: Deciduous, Alternate

Northern Red Oak (*Quercus rubra*)



- Large tree, can grow to over 100' tall.
- Acorns provide food for wildlife.

Eastern White Oak (*Quercus alba*)



Tree Identification for Beginners: Deciduous, Alternate

Northern Red Oak
(*Quercus rubra*)

Common and widespread, grows mainly in uplands.



Eastern White Oak
(*Quercus alba*)

Common and widespread, grows in rich, moist soils.



Tree Identification for Beginners: Deciduous, Alternate

Northern Red Oak (*Quercus rubra*)

- Twigs short and stout with clusters of buds at the tips.



Eastern White Oak (*Quercus alba*)

- Twigs greenish to gray, with small, blunt buds growing in clusters at the twig tips.



Tree Identification for Beginners: Deciduous, Alternate

Northern Red Oak (*Quercus rubra*)

- Acorns 1", have shallow, tightly scaled cups.



Eastern White Oak (*Quercus alba*)

- Acorns $\frac{3}{4}$ ", cup is shallow and stalk is short. Often more slender in shape than red oak acorns.



Tree Identification for Beginners: Deciduous, Alternate

Northern Red Oak (*Quercus rubra*)

- Young bark greenish grey with narrow, vertical cracks.
- Older tree has smooth, flat, lighter ridges intersecting with rough furrows. (Looks like ski tracks.) ★



Tree Identification for Beginners: Deciduous, Alternate

Eastern White Oak (*Quercus alba*)

- Young bark light gray with thin, flaky vertical strips.
- ★ Older bark is light gray with irregular blocks.



Tree Identification for Beginners: Deciduous, Alternate


American Beech (*Fagus grandifolia*)

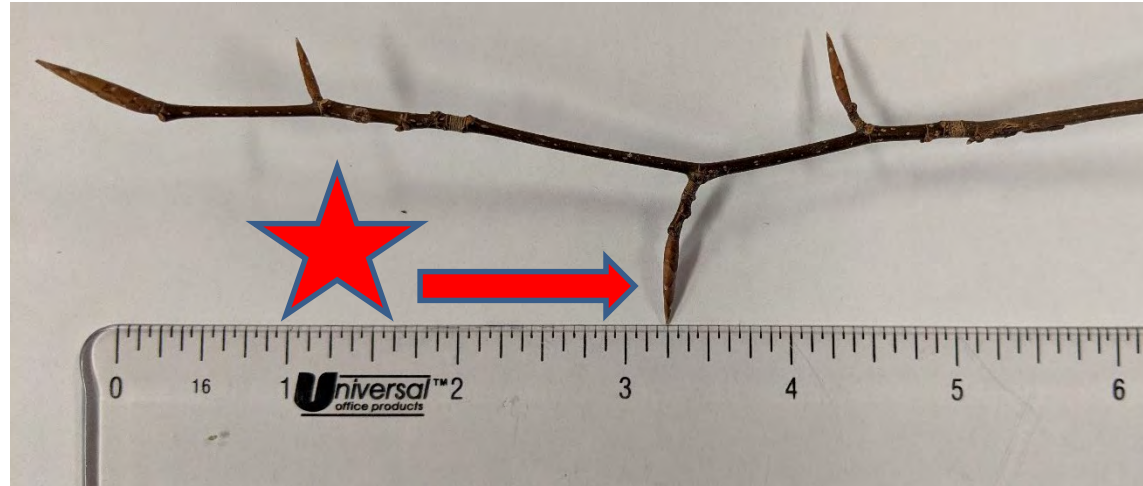
- Grows to 50 – 70' tall and can grow to over 100' tall.
- Common in well-drained uplands.
- Beechnuts can be an important food source for wildlife.



Tree Identification for Beginners: Deciduous, Alternate

American Beech (*Fagus grandifolia*)

- Twigs slender and have a zigzag shape with  pointed buds.
- Often retains leaves through winter.
- Fruit $\frac{3}{4}$ " and contains 1-3 small nuts.



Tree Identification for Beginners: Deciduous, Alternate

American Beech (*Fagus grandifolia*)

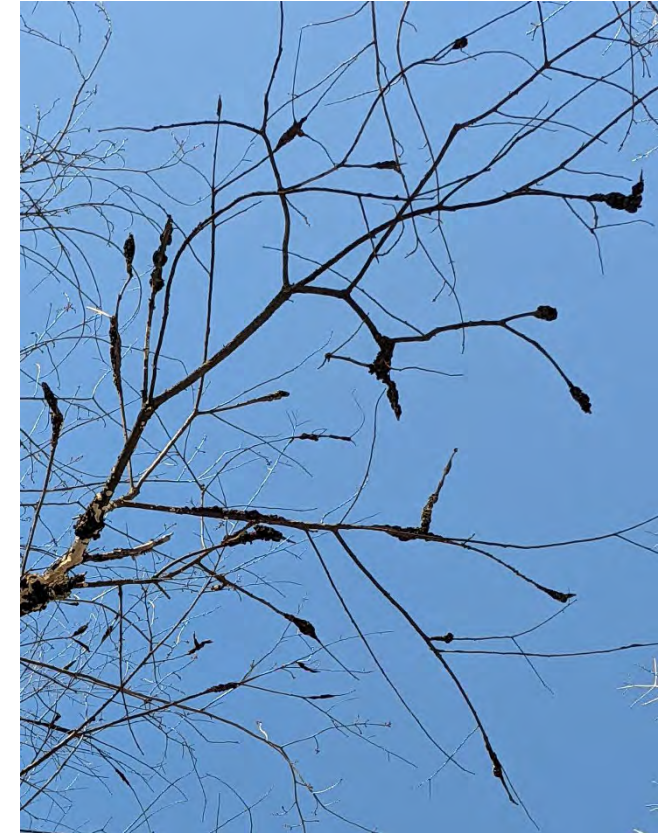
- Bark smooth and light gray in young and old trees.
- Commonly afflicted with beech bark disease, which causes blisters, cankers and cracks to form on bark.



Tree Identification for Beginners: Deciduous, Alternate

Black Cherry (*Prunus serotina*)

- Grows to about 60' tall.
- Common and widespread in woods and hedgerows.
- Fruit is an important food source for birds.
- Often infected with black knot disease.



Tree Identification for Beginners: Deciduous, Alternate

Black Cherry (*Prunus serotina*)

- Twigs slender and dark, with small dark buds.
- Fruit is small, less than 1/4" and grow in dangling clusters.



Tree Identification for Beginners: Deciduous, Alternate

Black Cherry (*Prunus serotina*)

- Young bark is smooth, reddish-brown with gray, horizontal lenticels.
- Older bark breaks into scales that curl outward and look like burned potato chips.



Tree Identification for Beginners: Deciduous, Alternate

Birch Bark Cheat Sheet

Gray birch



White birch



Black birch



Yellow birch



Tree Identification for Beginners: Deciduous, Alternate

Gray Birch (*Betula populifolia*)

- Small, slender tree; often grows with multiple trunks.
- Common pioneer species on disturbed soils.



Paper Birch (White Birch) (*Betula papyrifera*)

- Slender tree, grows to about 70' tall.
- Common in open woods or at wood edges.



Tree Identification for Beginners: Deciduous, Alternate

Gray Birch (*Betula populifolia*)

- Twigs slender and rough, with small buds.
- Male flower usually solitary at twig tips.



Paper Birch (White Birch) (*Betula papyrifera*)

- Twigs are stout for a birch, with buds relatively large.



Tree Identification for Beginners: Deciduous, Alternate

Gray Birch (*Betula populifolia*)

- Seeds tiny and winged, in cones that persist on the twig into the winter.



Paper Birch (White Birch) (*Betula papyrifera*)


- Seeds borne in cone-like structures that develop from female catkins.



Tree Identification for Beginners: Deciduous, Alternate

Gray Birch

(Betula populifolia)

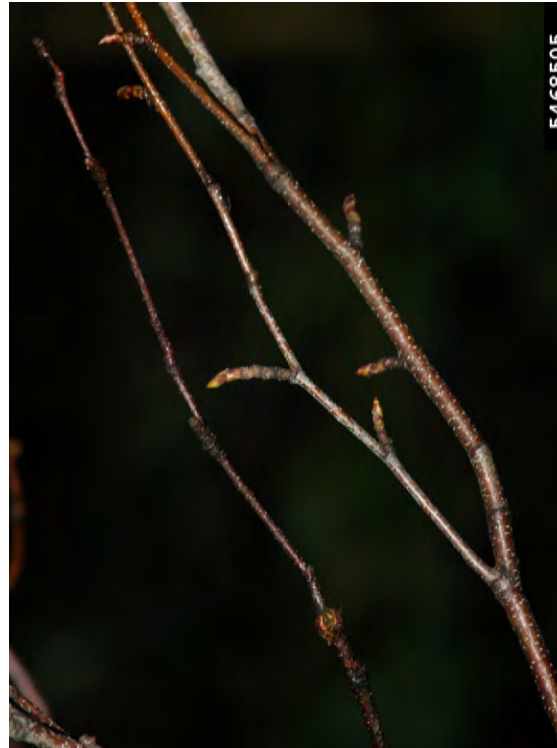
- Trunks marked by dark  chevron at base of branches.
- Young bark reddish-brown with pale lenticels.
- Older bark grayish white, non-peeling.



Tree Identification for Beginners: Deciduous, Alternate

Paper Birch (White Birch) (*Betula papyrifera*)

- Young bark reddish brown with pale horizontal lenticels.
- Older bark white and peeling, with thin, dark, horizontal lenticels.
- ★ Outer layers of bark separate from trunk in curly strips.



Becca MacDonald, Sault College, Bugwood.org



Tree Identification for Beginners: Deciduous, Alternate

Black Birch (Sweet Birch) (*Betula lenta*)

- Grows to about 60' tall.
- Common in northern hardwood forests.
- Sap has a wintergreen smell and can be used to make birch beer.



Tree Identification for Beginners: Deciduous, Alternate

Black Birch (Sweet Birch) (*Betula lenta*)

- Twigs dark gray-brown and glossy, buds hairless and pointed.
- Seeds borne in cone-like structures that develop from female catkins.



Tree Identification for Beginners: Deciduous, Alternate

Black Birch (Sweet Birch) (*Betula lenta*)

- Young bark reddish-brown, with light colored horizontal lenticels.
- Older bark dark gray, broken into irregularly shaped plates that curl away from the trunk.



Tree Identification for Beginners: Deciduous, Alternate

Birch Bark Cheat Sheet

Gray birch



White birch



Black birch



Yellow birch



Tree Identification for Beginners: Deciduous, Alternate

American Sycamore (*Platanus occidentalis*)

- Large tree, can grow to over 100' tall.
- Common in wet soils such as streambanks and bottomlands.



Tree Identification for Beginners: Deciduous, Alternate

American Sycamore (*Platanus occidentalis*)

- Twigs are relatively slender, with a zigzag shape. Buds short and stout.
- Fruit contained in ball-shaped structure, which can persist on the tree into the winter.




Paul Wray, Iowa State University, Bugwood.org



Rebekah D. Wallace, University of Georgia, Bugwood.org

Tree Identification for Beginners: Deciduous, Alternate

American Sycamore (*Platanus occidentalis*)

-  Young bark green and brown, flakes off to reveal paler green or whitish bark beneath.
- Older bark becomes less scaly, is gray with narrow furrows broken into blocks.
- Topmost branches smooth and whitish.

