

TREE IDENTIFICATION  
NATURAL RESOURCES – JUNIOR DIVISION

A. Softwoods

1. Longleaf Pine - 3 needles per bundle (cluster), 10 to 18 inches long, large whitish bud, large cone 6 to 10 inches when mature.
2. Loblolly Pine - 3 needles per bundle, 6 to 9 inches long, blue-green in color, bark is dark and deeply furrowed in trunk. Cones are flat on twigs and often curved. Lots of limbs on tree as they are shade tolerant.
3. Slash Pine - 2 and/or 3 needles per bundles, 8 to 12 inches long, glossy brown cones.
4. Shortleaf Pine - 2 and/or 3 needles per bundle, 3 to 5 inches long, dark in color, small cones 1-1/2 to 2-1/2 inches in size.
5. Virginia Pine - 2 short, twisted needles per bundle, 1-1/2 to 3 inches long, cones are small and remain on trees with dead limbs for years.
6. Eastern White - 5 needles per bundle (can vary 4-6), 3 to 5 inches in length, whitish  
Pine below and bluish green on top, bark is smooth and whitish in color, cones are 4 to 8 inches long, branches occur in regular whorls around the tree trunk.
7. Baldcypress - Flat, fan-shaped needles 1/2 to 3/4 inches long, cones are small and round, bark is fibrous and reddish in color, often found in running water but is used in landscaping.
8. Eastern - Needles 1/3 to 2/3 inches long, dark green and shiny  
Hemlock above, white streaks below, small cones 1/2 inch to 3/4 inch long, pyramidal crown with drooping branches, needles are 2-ranked on each side of twig (not flat like Baldcypress).
9. Eastern - Scale-like needles short, bluish green in color, fruit 1/4 to 1/3 inches in  
Redcedar diameter, dark blue at maturity, crown is compact and pyramidal.

B. Hardwoods – To help the student learn, the hardwood trees are divided into simple leaves, compound leaves and oaks. The simple leaves are divided into three groups—based on the margins—Entire (smooth), Serrated and Lobed.

B1. Simple leaves that have Entire (Smooth) margins

10. Persimmon - Leaves 2 to 6 inches long, 1 to 3 inches wide, pointed tip and rounded base, leaves in open turn reddish purple in summer and fall, dead buds remain on limbs for years. Fruit is edible when ripe, 3/4 to 1-1/2 inches in size and pulpy, bark is dark and broken into small blocks or checks.
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- 11. Blackgum - Leaves ovate and shiny above, 2 to 5 inches long, grow in clusters near the end of twigs, twigs and branches grow at right angles to trunk.
- 12. Catalpa - Heart-shaped leaves, 4 to 12 inches long, pointed tip, fruit is a slender, cylindrical pod 10 to 12 inches long containing many small winged seed, white blooms in spring of year.
- 13. Flowering Dogwood - Leaves 3 to 6 inches long, pointed tip and base and opposite on twigs, veins run to tip of leaf, small seed and red when mature, bark is broken into small blocks or checks.
- 14. Eastern Redbud - Heart-shaped leaf, 3 to 5 inches long and about as broad, fruit—a flat pod 2 ½ to 3 ½ inches long, flowers—small and bright purplish red in winter and early spring.
- 15. Sweetbay - Leaves 4 to 6 inches long, 1-1/2 to 3 inches wide, shiny and smooth above and silver or white below, small bur as fruit.
- 16. Southern Magnolia - Leaves—evergreen, 5 to 10 inches long, 2 to 3 inches wide, pointed at both ends, bright green and glossy above and rusty or green below, fruit—an egg-shaped bur 3 to 4 inches long with bright red seed, large fragrant white flower in spring.
- 17. Paulownia - Leaves opposite 6 to 16 inches long and 4-8 inches wide. Broadly ovate, long pointed tip, sometimes 3-toothed or 3-lobed, dull, light green and hairy above, paler and densely covered with hairs below.

**B2. Simple Leaves with Serrated margins (include spines)**

- 18. River Birch - Leaves somewhat triangular, 1-1/2 to 3 inches, double-toothed margin, dark green and smooth above, light green below, bark is papery on limb and trunks, small twigs have small white specks, found along creeks and streams, also used in landscaping.
- 19. American Beech - Leaves 2-1/2 to 5 inches long, oblong to oval long pointed margin coarsely toothed, parallel veins from mid-rib to margin, winter buds are slender and cigar shaped.
- 20. Eastern Cottonwood - Leaves somewhat triangular in shape, 3 to 5 inches long and broad rounded teeth on margins, petiole is flat.
- 21. Black Willow - Leaf is 3 to 6 inches long, narrow with both ends pointed, finely serrated leaf is smooth, often branching into several trunks near the ground with irregular crown or head.
- 22. Black Cherry - Leaves 2 to 6 inches long, 1 to 1-1/2 inches wide with pointed tip, leaves dark green and shiny above, fruit in clusters changing from green to black when ripe, leaves and bark bitter and aromatic smell, found throughout the South.

- 23. American Holly - Leaves 2 to 4 inches long with thickened margins armed with spiny teeth (2 to 12 spines), fruit is a small red berry.
- 24. Eastern -  
Hophornbeam - Leaves deciduous in fall, 2 ½ to 4 ½ inches long, 1 ½ to 2 inches wide, oval to oblong pointed, hairy on leaves.
- 25. Winged Elm - Leaves are 2 inches long and about 1 inch wide, oblong and tapering at each end, margins are doubly toothed, corky wood is often found on each side of twig, but is sometimes without.

**B3. Simple Leaves that have Lobes**

- 26. Sweetgum - Leaves are 4 to 6 inches long and wide, 5 points (star-shaped) margins are finely serrated, fruit is a round prickly head attached to a long stem, branches can have corky growths.
  - 27. American -  
Sycamore - Leaves 4 to 8 inches wide and long, round in outline with many irregular lobes, leaves are wooly when young but smooth at maturity, fruit is a brownish ball about 1 inch in diameter, composed of many seed, attached to a long stem, bark is creamy or greenish white that scales off.
  - 28. Sassafras - Leaves are 4 to 6 inches long, 2 to 4 inches wide and can have 0, 1, or 2 lobes, leaves that have 1 lobe are mitten-shaped, new growth is green in color with twigs and leaves aromatic, can have small blue fruit seated in a red cup on a red stalk.
  - 29. Mulberry - Leaves 3 to 5 inches long and 2-1/2 to 4 inches wide, usually have 1 to many lobes, but can be found without lobes, margins are toothed, while leaf rough to touch, fruit resembling a "blackberry", twigs when broken shows fine, silky hairs on the broken surface.
  - 30. Red Maple - Leaves and limbs are opposite, leaves are deeply divided into 2 to 5 lobes, margins are serrated, stems and leaves that are reddish or green in color, leaves are smooth, fruit is red in early spring and appears in pairs on long stem.
  - 31. Yellow-Poplar - Leaves 5 to 6 inches long and wide with 3 to 4 lobes, rounded base and a lobe instead of a pointed tip, flower is yellow and tulip-like in spring, fruit is a narrow upright cone made up of seed, bark on young trees is green and smooth while whitish and rougher on older trees.
  - 32. Silver Maple - Leaves opposite, 4 to 6 inches long and nearly as wide, deep 5 lobes and pointed. Fruit is long paired seed with wings.
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43. Live Oak - Leaves 2 to 5 inches long, oblong, margins slightly rolled, occasionally toothed near the end, thick, dark green leaf, leaves are evergreen.
44. Willow Oak - Leaves long and narrow, 1-1/2 to 5 inches long, 1/3 to 1 inch wide, pointed at both ends, willow-like, margins are smooth, leaf is smooth.
45. Water Oak - Leaves usually about 2-3 inches long, 1 to 1-1/2 inches wide, narrowed at the base, broader at the rounded, often lobed tip, dull green and smooth on top of leaf, pale and smooth below except for small tufts of hair in the axil of the larger veins
46. Laurel Oak - Leaves usually 3 to 4 inches long, about 3/4 inches wide, narrow at both ends. Margins are smooth, leaf is green and shiny above. Fruit an egg-shaped dark brown to black acorn about 1/2 inch long. Midrib margin is yellow-green in color.
47. Sawtooth Oak - Leaves dark on top with sawtooth-like projections on the margin of the leaf. Veins are parallel from the midrib to the margin. Large acorn with fringe-like structures on the cup. Twelve to 16 parallel veins with bristle-like teeth.
48. White Oak - Leaves 5 to 9 inches long, deeply divided by 7 to 11 finger-like rounded lobes, light green and smooth above, pale and smooth below, bark is light grey.
49. Post Oak - Leaves are deeply divided by 3 to 5 rounded lobes, broadest above the middle forming a cross-shape, leaf somewhat leathery and rough above and below, bark is gray, finely checked.
50. Chestnut Oak- Leaves are 4 to 9 inches long and 1-1/2 to 3 inches wide, margins are serrated or scalloped, bark-grayish brown to darker, coarsely furrowed on older trees, fruit-an egg-shaped, shiny large acorn.
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