



U.P. TREE IDENTIFICATION KEY from Michigan State University Extension

DECIDUOUS SUMMER KEY

Identifying deciduous, or broad-leaf bearing, trees using leaves isn't too hard and can be fun. However, leaves can vary in shape and size with a species or even on the same individual tree. Knowing as many identification features as possible is always a good idea. But that takes practice. Working these keys also takes practice.

Be careful to **READ THE DESCRIPTIONS CLOSELY and CAREFULLY!**

Carefully compare the descriptions with your sample and your memory of what the tree and habitat looked like. Remember that words such as "often" and "usually" do NOT mean "always". It is best to use a mature tree, or one that is not a seedling or sapling. Deciding if a small tree is just a shrub or if it is a young tree can be difficult. The appearance of a tree sometimes changes quite a bit as a tree ages (kind of like people). If you click on underlined, [blue words](#), you will link to the glossary for a definition of that word. Underlined [blue and CAPITALIZED words](#) are names of trees that will link you to another page with several similar species.

If you're not sure how to use a tree identification key like this, [click here](#). (link to home page and read the instructions!).

1. [Opposite](#) branching. (2)
1. [Alternate](#) branching. (12)
2. [Compound](#) leaves. (3)
2. [Simple](#) leaves. (6)
3. [Leaflets](#) 3-5, [coarsely-toothed](#). [BOXELDER](#)
3. [Leaflets](#) 5-9, [shallow-toothed](#). (4)
4. [Leaflets](#) 9-11, stemless. [BLACK ASH](#)
4. [Leaflets](#) 5-9, with stems. (5)
5. Top of [leaf scar](#) smile-shaped. [WHITE ASH](#)
5. Top of [leaf scar](#) straight. [GREEN ASH](#)
6. [Tree](#) size. (7)
6. [Shrub](#) size. (9)

- 7. Leaf margin smooth. [SUGAR MAPLE](#)
- 7. Leaf margin toothed. (8)
- 8. Leaves double-toothed, green both sides. [RED MAPLE](#)
- 8. Leaves with deep sinuses, silvery underneath. [SILVER MAPLE](#)
- 9. Leaf veins palmate, maple-like. (10)
- 9. Leaf not palmate. (11)
- 10. Leaf sinuses roundish, trunk with obvious stripes. [STRIPED MAPLE](#)
- 10. Leaf sinuses sharp-angled, trunk gray. [MOUNTAIN MAPLE](#)
- 11. Leaves with finely-toothed margins. [BUCKTHORN](#)
- 11. Leaves with smooth margins. [DOGWOOD](#)
- 12. Compound leaves. (13)
- 12. Simple leaves. (18)
- 13. Leaflets over 2". (14)
- 13. Leaflets under 2". (16)
- 14. Leaflets 7-11, with largest at end of leaf. Hickory nuts.
[BITTERNUT HICKORY](#)
- 14. Leaflets 11-23, largest in the middle or all even length. Twigs with chambered pith. (15)
- 15. Leaves 15-30 inches long, 11-17 leaflets. Dark pith.
[BUTTERNUT](#)
- 15. Leaves 12-36 inches long, 15-23 leaflets. Tan pith. [BLACK WALNUT](#)
- 16. Leaflets serrated [MOUNTAIN ASH](#)
- 16. Leaflets smooth margined. (17)
- 17. Leaves often double-compound, many leaflet pairs. [HONEYLOCUST](#)
- 17. Leaves single-compound, 7-19 leaflets. [BLACK LOCUST](#)
- 18. Lobed leaves. Smooth or toothed margins. (19)
- 18. Leaves not lobed. Simple leaves, toothed margins. (22)
- 19. Pointed lobes. (20)
- 19. Rounded lobes. (21)
- 20. Sinuses usually no closer to mid-vein than 1/2 inch. Tree usually with good form. [NORTHERN RED OAK](#)
- 20. Sinuses usually large and nearly to mid-vein. Scrubby-looking tree. [NORTHERN PIN OAK](#)
- 20. Angled lobes or very large teeth. Toothed margins. Thorns.
[HAWTHORNE](#)
- 21. Leaf "club-shaped" with one pair of sinus that nearly to mid-vein.

- Twigs with corky growths. Acorn cups fuzzy. Rare. [BUR OAK](#)
21. Lobes and sinuses fairly balanced. Twigs without corky growths. Acorn cups not fuzzy. Rare. [WHITE OAK](#)
22. Papery bark, like birches. (23)
22. Bark not papery. (24)
23. Leaves [single-toothed](#), white peeling bark. [PAPER BIRCH](#)
23. Leaves [double-toothed](#), yellow or bronze bark. [YELLOW BIRCH](#)
24. Leaf stems flat. (25)
24. Leaf stems round. (26)
25. Leaves have small teeth (<1/16"), bark usually white. [QUAKING ASPEN](#)
25. Leaves have large teeth (1/8-1/4"), woolly underneath in the spring. [BIGTOOTH ASPEN](#)
25. Triangular leaf with base angled-back towards the twig. Long, sticky buds. [COTTONWOOD](#)
26. Leaves & small twigs with bitter taste. (27)
26. Leaves & twigs not bitter. (30)
27. Rusty fuzz on back of leaf along mid-rib. [BLACK CHERRY](#)
27. No rusty fuzz. (28)
28. Leaf much longer than wide. [PIN CHERRY](#)
28. Leaf not much longer than wide. (29)
29. [Terminal buds](#) long and slender. [JUNEBERRY](#)
29. Terminal buds shorter, only about 2-3 times the width of the twig. [CHOKER CHERRY](#)
30. Leaf margins [double-toothed](#), elm-like or birch-like leaves. (31)
30. Leaf margins not as above. (35)
31. Bark cross-section [layered](#) and unequal [leaf base](#). (32)
31. Bark not layered. (34)
32. Leaves 2-3 inches. Bark and twigs with corky wings or ridges. [ROCK ELM](#)
32. Leaves usually over 3 inches long. Bark not as above. (33)
33. Leaves 4-6 inches, very scratchy. Inner bark slimy when chewed. [SLIPPERY ELM](#)
33. Leaves 4-6 inches. Bark cross-section with alternate dark & light layers. [AMERICAN ELM](#)
34. Bark smooth, small [understory](#) tree. [MUSCLEWOOD](#)
34. Bark shreddy, small [understory](#) tree. [IRONWOOD](#)

35. Leaves much longer than wide. (36)
35. Leaves not so long & narrow. (38)
36. Shrub size. SMALL WILLOWS
36. Tree size. (37)
37. Leaf bases rounded with stipules. BLACK WILLOW
37. Leaf bases sharply angled without stipules (or tiny ones).
PEACHLEAF WILLOW
38. Shrub or small tree. Leaves may be somewhat lobed. Thorns.
HAWTHORNE
38. Tree size. (39)
39. Heart-shaped leaves. Trees often in clumps. Brick-red, smooth buds. BASSWOOD
39. Leaves not heart-shaped. (40)
40. Leaves with large, coarse, pointed teeth. AMERICAN BEECH
40. Leaves with teeth that are not so obvious. (41)
41. Leaves are rusty-looking with barely serrate margins. Long, sticky buds. BALM-of-GILEAD
41. Leaf serrations point to leaf tip. Twigs and bark with corky ridges. HACKBERRY

Some species not covered in this key but included in the species description pages are: [pears](#), [plums](#), [black maple](#), [Norway maple](#), [elderberries](#), [weeping willow](#), [pussy willow](#), and [Bebb's willow](#).

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This site created and maintained by Bill Cook, MSU Extension Forester for the Upper Peninsula of Michigan. Editing and modification is ongoing. Submit suggestions, questions, and corrections to cookwi@pilot.msu.edu or call 906-786-1575.