Black Rock Forest Consortium
Tree Identification Dichotomous Key

1.	a. Woody plants usually with several main stems, and usually less than 15 feet tall- ***shrubs*** *(<u>not</u> trees): STOP HERE*
	b. Woody plants with just one or a few stems, capable of growing over 15 feet tall: **Go to 2**
2. Trees	a. Trees with needles or scales instead of leaves, 1 – 5 per bundle (conifers): Go to 3
	b. Trees with broad, flat leaves that fall each year in autumn (**deciduous trees**): **Go to 6**
3. Trees with Needles or scales (conifers)	a. Trees with evergreen <u>needles:</u> **Go to 4**
	b. Trees with overlapping, flattened scales, purple-blue berries: STOP you've found a ***red cedar!***
4. Conifers with Needles	a. Leaves present as long needles in groups of 5: STOP you've found a ***white pine!***
	b. Needles borne singly: **Go to 5**
5. Conifers with single needles	a. Needles flattened- STOP you've found an ***eastern hemlock!***
	b. Needles square in cross-section and pointy, cones 3 - 6 inches long- STOP you've found a ***Norway spruce!***
6. Deciduous Trees	a. Leaves and branches arranged mostly opposite each other along twigs and main stem ("**opposite**"): **Go to 7**
	b. Leaves and branches arranged alternately along twigs and main stem ("**alternate**"): **Go to 12**

7. Deciduous trees with Opposite branches/leaves	a. Leaves with a single blade and stem ("**simple**"): **Go to 8**
	b. Leaves divided into three to many leaflets each attached to a central midrib ("**compound**"), twigs mostly smooth, leaves with 5 – 9 leaflets- STOP you've found a ***white ash!***
8. Deciduous trees with opposite branches and simple leaves	a. Leaf blades divided into rounded or pointed sections ("**lobed**"): **Go to 9**
	b. Leaf blades <u>not</u> divided into rounded or pointed sections ("**not lobed**"): **Go to 11**
9. Deciduous trees with opposite branches and simple, lobed leaves	a. Margin of leaf blades bearing a series of pointy teeth ("**toothed**"), with three main lobes, and with main veins on leaf blades radiating from a single point at the leaf base ("**palmate**"): **Go to 10**
	b. Leaf blades with a smooth margin lacking fine teeth, with five main lobes, and with main veins radiating from a single point at the leaf base ("**palmate**")- STOP you've found a ***sugar maple!***
10. Deciduous trees with opposite branches and simple, lobed leaves and teeth	a. Leaves dull white underneath, bark gray- STOP you've found a ***red maple!***
	b. Leaves green underneath, bark green and smooth, with vertical stripes- STOP you've found a ***striped maple!***
11. Deciduous trees with opposite branches and simple, non-lobed leaves	a. Margin of leaf blades bearing a series of pointy teeth ("**toothed**")-STOP you've found a ***European buckthorn!***
	b. Leaf blades with a smooth, continuous margin ("**entire**"), veins parallel to leaf edge- STOP you've found a ***flowering dogwood!***
12. Deciduous trees with alternate branches	a. Leaves with a single blade and stem ("**simple**"): **GO to 13**
	b. Leaves divided into three to many leaflets each attached to a central midrib ("**compound**"): **GO to 30**

13. Deciduous trees with alternate branches and simple leaves	a. Leaf blades often divided into rounded or pointed sections ("**lobed**"): **Go to 14**
	b. Leaf blades <u>not</u> divided into rounded or pointed sections("**lobes**"): **Go to 18**
14. Deciduous trees with alternate branches and simple, lobed leaves	a. Veins on leaf blades radiating from a single point at the leaf base ("**palmate**"), leaf 4-lobed, green underneath- STOP you've found a ***tulip poplar!***
	b. Veins on leaf blades branching from a central vein ("**pinnate**"): **Go to 15**
15. Deciduous trees with alternate branches and simple, lobed, pinnate leaves	a. Leaves shallowly to deeply dissected, stems not green: **Go to 16**
	b. Leaves often shaped like a mitten, stem green, often showing three different leaf shapes on one tree- STOP you've found a ***sassafras!***
16. Deciduous trees with alternate branches and simple, lobed, pinnate leaves	a. Leaf lobes rounded: **Got to 17**
	b. Leaf lobes pointed, deeply lobed- STOP you've found a ***red oak!***
17. Deciduous trees with alternate branches and simple, lobed, pinnate leaves and rounded lobes	a. Very deeply fissured bark, shallow leaf lobes- STOP you've found a ***chestnut oak!***
	b. Bark not deeply fissured, deep leaf lobes, bark whitish- STOP you've found a ***white oak!***
18. Deciduous trees with alternate branches and simple, non-lobed leaves	a. Margin of leaf blades bearing a series of pointy teeth ("toothed"), lateral veins branching from a central vein ("pinnate"): **Go to 19**
	b. Leaf blades with a smooth, continuous margin ("**entire**"), lateral veins branching from a central vein ("pinnate")- STOP you've found a ***black gum!***

19. Deciduous trees with alternate branches and simple, non-lobed, toothed, pinnate leaves	a. Stems and branches often with thorns- STOP you've found a ***hawthorn!***
	b. Stems and branches usually without thorns: **Go to 20**
20. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and bark without thorns	a. Leaf margins with wide-spaced sharp teeth: **Go to 21**
	b. Leaf margins with rounded or closely-spaced teeth: **Go to 22**
21. Deciduous trees with alternate branches, simple, non-lobed, widely toothed, pinnate leaves and bark without thorns	a. Bark smooth, tight, steel-gray in color- STOP you've found an ***American beech!***
	b. Bark gray-brown with vertical grooves, leaves 6 – 8 inches long- STOP you've found an ***American chestnut!***
22. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and bark without thorns	a. Rounded teeth on leaf margins- *STOP you've found a* ***basswood!***
	b. Leaves with closely-spaced pointed teeth: **Go to 23**
23. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and bark without thorns	a. Bark with numerous horizontal lines: **Go to 24**
	b. Bark without numerous horizontal lines- **Go to 27**
24. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and bark without thorns and with numerous horizontal lines	a. Bark chalky white, leaves nearly triangular with flat base- STOP you've found a ***gray birch!***
	b. Bark not whitish, leaves elliptical: **Go to 25**

25. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and bark without thorns, with numerous horizontal lines and not whitish.	a. Bark yellowish to bronze, peels into strips- STOP you've found a ***yellow birch!***
	b. Bark tight, dark gray to blackish- **Go to 26**
26. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and bark without thorns, with numerous horizontal lines, bark dark gray to black.	a. Leaves lancelet in shape (long and skinny) ~3-6", dark green and shiny- STOP you've found a ***black cherry!***
	b. Leaves not longer than 4", twigs smells like wintergreen when scratched- STOP you've found a ***black birch!***
27. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and bark without thorns, without numerous horizontal lines	a. Bark shredding, peeling or breaking off in plates- **Go to 28**
	b. Bark <u>not</u> shredding, peeling nor coming off in plates- **Got to 29**
28. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and peeling bark without thorns and without numerous horizontal lines	a. Bark dark gray to black coming off in horizontal plates- STOP you've found a ***black cherry!***
	b. Bark light peeling in vertical strips- STOP you've found a ***hop hornbeam!***
29. Deciduous trees with alternate branches, simple, non-lobed, toothed, pinnate leaves and non-peeling bark without thorns and without numerous horizontal lines	a. Bark gray with numerous bulges giving a muscle like appearance- STOP you've found ***ironwood***(also known as ***muscle wood***)!
	b. Bark gray <u>without</u> bulges and with vertical stripes- STOP you've found a ***shadbush!***

30. Deciduous trees with alternate branches and compound leaves	a. Margin of leaflet blades bearing a series of pointy teeth ("**toothed**"), lateral veins on leaflet blades branching from a central vein ("**pinnate**"): **Go to 31**
	b. Leaflet blades with a smooth, continuous margin ("**entire**"), lateral veins on leaflet blades branching from a central vein ("**pinnate**"): **Go to 32**
31. Deciduous trees with alternate branches and compound leaves with toothed, pinnate leaflets.	a. Bark tight and gray- STOP you've found a ***pignut hickory!***
	b. Bark breaking into loosely attached plates- STOP you've found a ***shagbark hickory!***
32. Deciduous trees with alternate branches and compound leaves with entire, pinnate leaflets	a. Leaflets oval, thorns on stems-STOP you've found a ***black locust!***
	b. Leaflets pointed with small bumps at base, strong odor when crushed- STOP you've found a ***tree-of-heaven!***