

# Common Trees of Pennsylvania

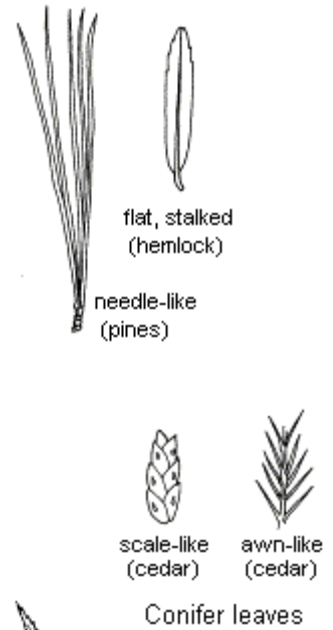
(Summer Key for PA Trees)

Leaf Key: Select the descriptive phrase that matches your tree and follow the numbers to an answer.

- 1a. Leaves needle-like or scale-like.....Conifers, 2  
 1b. Leaves broad and flat .....Broadleaf trees, 12

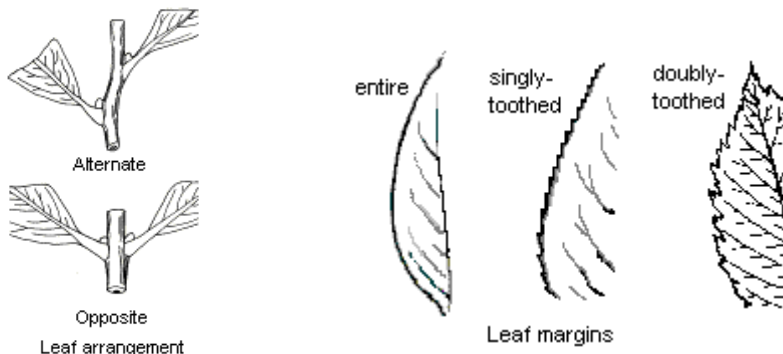
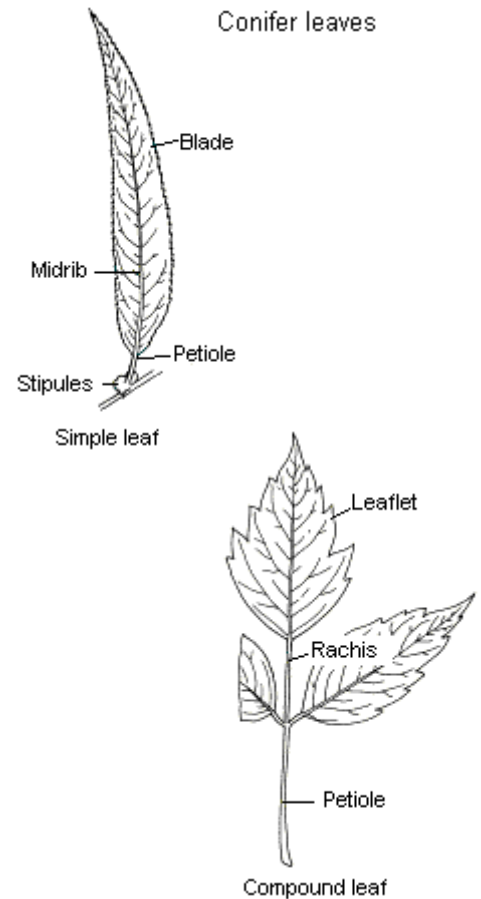
## Conifers

- 2a. Leaves scale-like ..... 3  
 2b. Leaves needle-like ..... 4  
 3a. Scales pointed, twigs not flat ..... Red cedar  
 3b. Scales blunt, twigs flat ..... White cedar  
 4a. Needles attached singly on twigs..... 5  
 4b. Needles attached in bundles or clusters ..... 7  
 5a. Needles flat, blunt ..... 6  
 5b. Needles four-sided, and sharp-pointed..... Spruce  
 6a. Needles attached to twigs by small stalks ..... Hemlock  
 6b. Needles without stalk attachment ..... Balsam fir  
 7a. Needles in bundles with a sheath at the base ..... 8  
 7b. Needles in clusters on short spur-branches, no sheaths ..... Larch  
 8a. Needles in bundles of 5 ..... White pine  
 8b. Needles not in bundles of 5 ..... 9  
 9a. Needles in bundles of 3 ..... Pitch pine  
 9b. Needles in bundles of 2 ..... 10  
 10a. Needles about 4 inches long..... 11  
 10b. Needles 1.5-3 inches long ..... Virginia pine  
 11a. Needles stiff and sharp-pointed ..... Austrian pine  
 11b. Needles flexible ..... Red pine



## Broadleaf Trees

- 12a. Leaf arrangement opposite or whorled ..... 13  
 12b. Leaf arrangement alternate ..... 18  
 13a. Leaf arrangement opposite ..... 14  
 13b. Leaf arrangement whorled ..... Catalpa  
 14a. Leaf shape simple ..... 15  
 14b. Leaf shape compound ..... 16  
 15a. Leaf margin entire ..... Dogwood  
 15b. Leaf margin lobed ..... Maples  
 16a. Leaf pinnately compound ..... 17  
 16b. Leaf palmately compound ..... Buckeye or horsechestnut  
 17a. Leaf divided into 3 to 5 leaflets ..... Boxelder  
 17b. Leaf divided onto 7 leaflets ..... Ash  
 18a. Leaf shape simple ..... 19  
 18b. Leaf shape compound ..... 39  
 19a. Leaf margins entire ..... 20  
 19b. Leaf margins deeply cut, lobed or toothed ..... 22  
 20a. Leaf base heart-shaped ..... Redbud  
 20b. Leaf base tapering ..... 21  
 21a. Leaves 2-4 inches long ..... Black gum  
 21b. Leaves 5-8 inches long ..... Cucumber magnolia



**Please do not tear apart this key.**

If damaged, please notify a station leader so it can be removed from the testing circuit. Thank you!

# Common Trees of Pennsylvania

Leaf Key: Select the descriptive phrase that matches your tree and follow the numbers to an answer.

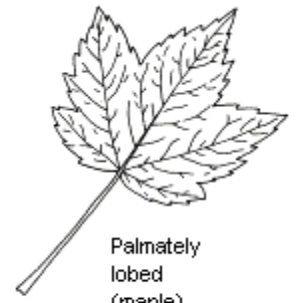
22a. Margins deeply cut or lobed, with or without teeth.....	23
22b. Margins merely toothed .....	28
23a. Leaf veins palmate, five deeply cut lobes .....	Sweet gum
23b. Leaf veins pinnate.....	24
24a. Tip of leaf square or notched.....	Tulip-tree
24b. Tip of leaf neither square nor notched .....	25
25a. Leaves lobed and toothed or more than three lobed .....	26
25b. Different leaves on the same tree, entire, two lobed or three lobed .....	Sassafras
26a. Leaf lobes many and regular .....	27
26b. Leaf lobes irregularly shaped and coarsely toothed .....	Mulberries
27a. Lobes rounded, without bristle-tips .....	White oak group
27b. Lobes sharp-pointed with a hair-like bristle on the tip of each lobe .....	Red oak group
28a. Teeth coarse, one at the end of each main lateral vein.....	29
28b. Teeth fine, several teeth between each main lateral vein.....	30
29a. Leaves slender, 3 times as long as wide .....	Chestnut
29b. Leaves not more than 2 times as long as wide.....	Beech
30a. Leaves very narrow, 4-5 times as long as wide.....	Willows
30b. Leaves broader, less than 4 times as long as wide .....	31
31a. Leaves not over 1.5 times as long as wide.....	32
31b. Leaves about twice as long as wide .....	33
32a. Leaf base unequally heart-shaped, petiole round.....	Basswood
32b. Leaf base not heart-shaped, sides equal at base, petiole tends to be flattened.....	Aspens
33a. Leaves smooth.....	34
33b. Leaves rough or hairy .....	35
34a. Petioles with one or two dark glands, broken twigs have a sour odor .....	Cherries
34b. Petioles without dark glands .....	Juneberries
35a. Leaves rough .....	36
35b. Leaves soft and hairy.....	37
36a. Leaf margins doubly-toothed from the unequal base .....	Elms
36b. Leaf margins singly toothed from above the base .....	Hackberry
37a. Leaf margins doubly-toothed .....	Birches
37b. Leaf margins singly-toothed.....	38
38a. Leaf margins with rounded or blunt teeth .....	Red mulberry
38b. Leaf margins with sharp teeth.....	Hop hornbeam
39a. Sap milky .....	Sumac
39b. Sap not milky .....	40
40a. Terminal leaflet much larger than other leaflets.....	Hickories
40b. Terminal leaflet only as large or smaller than other leaflets, or lacking .....	41
41a. Leaflets with rounded tips .....	Locusts
41b. Leaflets pointed.....	42
42a. Leaves smooth .....	43
42b. Leaves hairy .....	44
43a. Leaves not over 7 inches long .....	Mountain ash
43b. Leaves over 12 inches long .....	Ailanthus
44a. Terminal leaflet as large as other leaflets .....	Butternut
44b. Terminal leaflet small or lacking .....	Black walnut



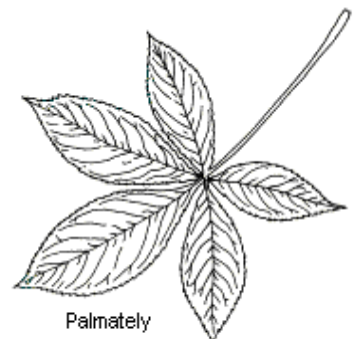
Pinnately lobed  
(White oak)



Pinnately  
compound  
(ash)



Palmately  
lobed  
(maple)



Palmately  
compound  
(buckeye)

## **TREE VOLUME IN BOARD FEET (1/4 inch international)**

DBH (inches)	Number of 16-foot logs							
	1/2	1	1-1/2	2	2-1/2	3	3-1/2	4
	<b>Contents in board feet</b>							
12	30	60	80	100	120			
14	40	80	110	140	160	180		
16	60	100	150	180	210	250	280	310
18	70	140	190	240	280	320	360	400
20	90	170	240	300	350	400	450	500
22	110	210	290	360	430	490	560	610
24	130	250	350	430	510	590	660	740
26	160	300	410	510	600	700	790	880
28	190	350	480	600	700	810	920	1020
30	220	410	550	690	810	930	1060	1180
32	260	470	640	790	940	1080	1220	1360
34	290	530	730	900	1060	1220	1380	1540
36	330	600	820	1010	1200	1380	1560	1740
38	370	670	910	1130	1340	1540	1740	1940
40	420	740	1010	1250	1480	1700	1920	2160
42	460	820	1100	1360	1610	1870	2120	2360

# Pennsylvania Envirothon

## Key to Selected Invasive Trees, Shrubs & Vines

- 1. Leaves alternate. ....2
- 1. Leaves opposite or whorled. ....3
  - 2. Leaves simple.....6
  - 2. Leaves compound .....8
- 3. Climbing vine, flowers paired at each node..... Japanese honeysuckle, *Lonicera japonica*
- 3. Erect shrubs .....4
  - 4. Leaf edges not toothed (“entire”) .....5
  - 4. Leaves toothed ..... Winged burning-bush, *Euonymus alatus*
- 5. Flowers in terminal clusters, tubular with 4 lobes .....Privet, *Ligustrum* species
- 5. Flowers in pairs from leaf bases, tubular with 5 lobes ..... Bush honeysuckles, *Lonicera* species
  - 6. Climbing vine, leaves round, bluntly toothed.....Oriental bittersweet, *Celastrus orbiculatus*
  - 6. Erect shrubs .....7
- 7. Leaves oblong to lance-shaped, 1-3” long, silvery scaly undersides.....Autumn olive, *Elaeagnus umbellata*
- 7. Leaves spoon-shaped, ½-¾” long, light green undersides.....Japanese barberry, *Berberis thunbergii*
  - 8. Tree, leaflets 11-41, a few teeth with glands at the base ..... Tree-of-heaven, *Ailanthus altissima*
  - 8. Thorny shrub, leaflets 5-11, to 1” long, many fine teeth.....Multiflora rose, *Rosa multiflora*