Key to the Identification of Trees and Shrubs Common to Allegany County

(most ornamental species are not included)

Prepared by Cheryld L. Emmons, Ph.D., 2010

(clickable version with images at http://people.alfred.edu/~emmonsc/treekey/title%20page.php)

- 1a. Leaves are needle-like, scalelike, or narrowly flattened, less than 3 mm wide go to 2
 - 2a. Leaves scalelike or narrowly triangular and pointed go to 3
 - 3a. Twigs are flattened and the seeds are in a small tan cone

Eastern white cedar Thuja occidentalis

- 3b. Twigs are not flattened and the seeds are in a berry-like structure go to 4
 - 4a. Leaves are narrowly triangular or pointed Common Juniper Juniperus communis
 - 4b. Leaves are scalelike (not pointed) Eastern Red cedar Juniperus virginiana
- 2b. Leaves needle-like or narrow and flattened go to 5
 - 5a. Needles are in bundles (fascicles) of two or more go to 6
 - 6a. Needles are in groups of 2 to 5; usually with a thin sheath at the base go to 7
 - 7a. Needles are slender; 5 per fascicle; cones are slender and flexible

Eastern White Pine Pinus strobus

- 7b. Needles are 2 per fascicle; cones are rigid go to 8
 - 8a. Needles are generally less than 3 inches long, twisted Scotch Pine Pinus sylvestris
 - 8b. Needles are more than 4 inches long, not twisted **Red Pine** *Pinus resinosa*
- 6b. Bundles contain more than five needles and they are deciduous

Larch or Tamarack Larix larcinia or L. decidua

- 5b. Needles are produced singly on the stem **go to 9**
 - 9a. Needles are somewhat 4-sided, not flattened go to 10
 - 10a. Cones are 2.5 to 7 inches long; flexible scales go to 11
 - 11a. Branches are horizontal to drooping; needles pungent when crushed

Colorado Blue Spruce Picea pungens

11b. Branches with tips upturned; not pungent when crushed

Norway Spruce Picea abies

- 10b. Cones are 1 2.5 inches long Red Spruce Picea rubens
- 9b. Needles are flattened go to 12
 - 12a. Needles are abruptly narrowed onto short stalk; white lines on under surface; cones are terminal **Eastern Hemlock** *Tsuga canadensis*
 - 12b. Needles are not abruptly narrowed onto short stalks; cones on upper side of branches **Balsam Fir** *Abies balsamea*

1b. Leaves are broad, not needle-like or scale-like go to 13

13a. Leaves opposite go to 14

14a. Leaves simple go to 15

15a. Small tree or shrub go to 16

16a. Leaf margins entire, not lobed or toothed go to 17

17a. Leaves heart-shaped Common Lilac Syringa vulgaris

17b. Leaves not heart-shaped go to 18

18a. Veins follow leaf margins **Dogwoods** Cornus spp.

18b. Veins do not follow leaf margins Honeysuckles Lonicera spp.

16b. Leaves toothed or lobed go to 19

19 a. Leaves toothed, twigs ending in sharp spines

Common Buckthorn Rhamnus cathartica

19b. Leaves lobed Striped Maple Acer pensylvanicum

15b. Large trees go to 20

20a. Leaves with 3-lobes, whitish on under surface Red Maple Acer rubrum

20b. Leaves with 5 deep pointed lobes, pale green on under surface go to 21

21a. Leaf stalk exudes milky juice when broken Norway Maple Acer platanoides

21b. Leaf stalk without milky juice Sugar Maple Acer saccharum

14b. Leaves compound go to 22

22a. Leaves pinnately compound go to 23

23a. Leaves with whitish lower surface, habitat upland forest

White Ash Fraxinus americana

23b. Leaves shiny green above, green or pale and slightly hairy below, habitat stream bank or flood plain **Green Ash** *Fraxinus pennsylvanica*

22b. Leaves fan-compound Horsechestnut Aesculus hippocastanum

13b. Leaves alternate go to 24

24a. Leaves Simple go to 25

25a. Thorny Plants go to 26

26a. Thorns without buds or leaves, mostly over 1" long Hawthorns Crataegus spp.

26b. Thorns equipped with buds or leaves Crabapple Pyrus coronaria

25b. Thornless plants go to 27

27a. Some or all leaves lobed go to 28

28a. Leaves palmately-lobed go to 29

29a. Margins of lobes entire, 3-4 lobed, leaves notched at tip

Tulip Tree Liriodendron tulipifera

29b. Margins of lobes toothed, leaves not notched

Sycamore Plantanus occidentalis

28b. Leaves pinnately-lobed, with single midvein, other veins more or less at right angles to midvein **Oaks** go to 30

30a. Lobes with bristle tips Red Oak Quercus rubra

30b. Lobes rounded, not bristle-tipped

White Oak Quercus alba

27b. Leaves not lobed go to 31

31a. Margins of leaves not toothed or wavy go to 32

32a. Large tree Cucumber Tree Magnolia acuminata

32b. Shrub Late low Blueberry Vaccinium angustifolium

31b. Margins of leaves toothed, serrate or wavy go to 33

33a. Margins of leaves wavy, plant a shrub

Common Witch Hazel Hamamelis virginiana

33b. Margins of leaves toothed or serrate go to 34

34a. Margins of leaves singly toothed or serrate go to 35

35a. Teeth or Serrations coarse go to 36

36a. Leaves heart-shaped or triangular go to 37

37a. Leaves heart-shaped Basswood Tilia americana

37b. Leaves triangular; flattened petioles **Poplars Populus spp.**

36b. Leaves elongated or ovate go to 38

38a. Leaves elongated, buds blunt, bark dark

American chestnut Castanea dentata

38b. Leaves ovate, slender buds, smooth grey bark

American Beech Fagus grandifolia

35b. Serrations fine go to 39

39a. Leaves ovate, bark with dark grey vertical stripes

June berry, Service berry, Shadbush Amelanchier laevis

39b. Leaves linear or lanceolate **go to 40**

40a. Leaves linear or hairy go to 41

41a. Leaves hairy beneath go to 42

42a. Stipules often large; leaves toothed mostly above the middle **Pussy Willow** *Salix discolor*

42b. Stipules small or lacking; leaves toothed to the base Weeping Willow Salix babylonica

41b. Leaves not hairy beneath go to 43

43a. Leaf tips pointed; stipules conspicuous

Black Willow Salix nigra

43b. Leaf tips not pointed; stipules small or lacking

White Willow Salix alba

40b. Lanceolate leaves go to 44

44a. Tufts of red or white hairs along mid-rib

Black Cherry Prunus serotina

44b. No hairs along mid-rib

Pin Cherry Prunus pensylvanica

34b. Margins of leaves doubly serrate go to 45

45a. Leaves triangular White (gray) Birch Betula populifolia

45b. Leaves ovate go to 46

46a. Base of leaves oblique Slippery Elm Ulmus rubra

46b. Base of leaves not oblique go to 47

47a. Twigs with wintergreen flavor go to 48

48a. Leaves short-pointed, rounded at base, bark on trunk shiny yellowish, peeling, hairy twigs

Yellow Birch Betula alleghaniensis

48b. Leaves long-pointed, often notched at base, bark on trunk black, not papery, twigs not hairy

Sweet Birch, Betula lenta

47b. Twigs without wintergreen flavor **go to 49** 49a. Bark smooth, light gray

American Hornbeam (Blue Beech) *Carpinus caroliniana* 49b. Bark scaly, scales easily rubbed off

Eastern Hop Hornbeam (Ironwood) Ostrya virginiana

- 24b. Leaves Compound go to 50
 - 50a. Margins of leaflets entire Black Locust Robinia pseudoacacia
 - 50b. Margins of leaflets toothed (serrate) go to 51
 - 51a. Leaflets 5-11 (Hickories) go to 52
 - 52a. Leaflets 5-7, with upper 3 largest Shagbark Hickory Carya ovata
 - 52b. Leaflets 7-11, long narrow, sharp-pointed **Bitternut Hickory** *Carya cordiformis* 51b. Leaflets 11-23 **go to 53**
 - 53a. Buds, fruit and young twigs and leaves hairy, small trees

Staghorn Sumac Rhus typhina

53b. Buds, twigs, leaves not hairy, large trees (Walnuts) Butternut Juglans cinerea