

Maude Adams Road Plant Walk  
Mountain Top Arboretum  
Marc Wolf  
June 18, 2016

## DECIDUOUS TREES

### *Acer pensylvanicum*, striped maple, moosewood, Sapindaceae

Understory tree

Leaves opposite, serrate, 3-lobed, 5" to 7" long and wide, bright green.

Green, white-striped bark very striking.

Flowers yellow in long pendulous chains, followed by long samaras in pendulous chains.

Among the most shade-tolerant of deciduous trees, can sucker in very deep shade.



### *Acer rubrum*, red maple, Sapindaceae

Leaves: opposite, simple, 2-5" with 3-5 palmate lobes, irregular serrated margin.

small red flowers in dense clusters in later winter early spring, one of first maples to flower.

Fruit: double samara

Bark: young bark is smooth and light gray, older bark is scaly gray brown.

The species is polygamo-dioecious: Some trees are entirely male, producing no seeds; some are entirely female; and some are monoecious, bearing both male and female flowers. On monoecious trees, functioning male and female flowers usually are separated on different branches.



***Acer saccharum*, sugar maple, Sapindaceae**

Leaves opposite, entire, 3-6" long, 5 lobed with 2 smaller basal lobes and blunt pointed tips.

Fruit: double samara, 1-1 ¾ " long

Buds: prominent terminal bud, hard, pointed, dark brown and gray

Bark: smooth gray-brown when young, maturing to thick irregular, recurved plates.



***Amelanchier arborea* (or *canadensis* or *laevis*)**

**downy serviceberry, shadblow, or Alleghany serviceberry, Rosaceae  
(also called Juneberry)**

Small tree or multi-stemmed shrub.

Leaves alternate, ovate, 1-1/2-3" long,

Flower, showy, white.

Fruit: red to purple round and berry-like.



*A. laevis* has hairless foliage, and new growth in Spring is bronzeish to purplish-tinged, compared to *A. arborea*.

*A. canadensis* is more shrub-like, though can also be a small tree.

***Betula alleghaniensis*, yellow birch, Betulaceae**

Leaves alternate, simple, 3-5" long

Elongated oval, doubly serrate (when the teeth are serrate themselves)

Wintergreen smell when twig is broken (not as strong as *Betula lenta*)

Monoecious with male and female catkins

5-8 per cluster (The male catkins are long, drooping and yellowish, appearing in cluster of five to eight. The female flowers are 5/8 to 3/4 inches long, upright catkins. Adirondackvic.org)

Bark: yellowish and peeling



***Betula papyrifera*, paper birch, Betulaceae**

Paper birch wood is waterproof and therefore good for making canoes

Leaves alternate, ovate, 2-5" long by 1-3" wide, acuminate or pointed leaf tip, leaf base acute or heart shaped.

Flowers: monoecious, wind pollinated catkins in 2-3's and fat.

Fruit: brown, winged nutlets.

Bark: smooth reddish-brown with horizontal lenticels when young becoming papery, chalky, white and exfoliating in sheets exposing orange inner bark. Old bark also has irregular black patches.



***Carpinus caroliniana*, musclewood, Betulaceae**

Leaves alternate, oblong, doubly-serrate.

Smooth gray bark with muscly, fluted appearance, habit often arching over.

Fruit: clusters of nutlets inside 3-lobed bracts. (bract is a modified leaf.)

Understory tree.



***Fagus grandifolia*, American beech, Fagaceae**

Leaves alternate, simple, 2-5" long, pinnately-veined, 11-14 pairs of veins, with each vein ending in a sharp serration,

shiny green above, very waxy and smooth

Flower: monoecious, male flowers on round heads hanging from a 1" stalk, female flowers borne on shorter spikes, appearing in spring.

Buds: sharp pointed, resemble thorns.

Bark: smooth, thin, gray. Bark on older trees can look wrinkled.



***Fraxinus americana*, white ash, Oleaceae**

Leaves compound, opposite. Usually 7 leaflets.

Dioecious, fruit is a single samara.

Gray bark develops distinctive diamond-shaped, basket weave ridging on mature trees.

White ash is the wood used for Louisville Slugger baseball bats.



***Ostrya virginiana*, hophornbeam, Betulaceae**

Leaves alternate, simple, 2 to 6 inches long and half as wide; dark green above and paler below, doubly serrate.

Monoecious; male catkins are usually about 1 inch long, in groups of threes and visible throughout the winter. Female catkins are visible in April.

Fruit: "hop-like" pale green, papery capsules.

Bark: exfoliating vertical strips. Very distinct.

Understory tree



***Populus tremuloides*, quaking aspen, Salicaceae**

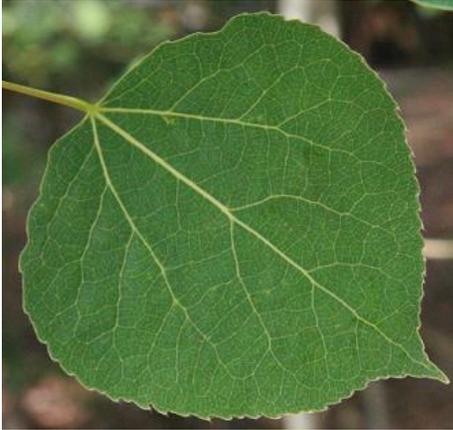
Leaf alternate, lightly toothed, nearly round to triangular, -3". Glossy green.

Twisted petiole shimmers the leaf

Bark: chalky white with black patches. Not as peeling as paper birch.

Medium sized tree, dioecious.

Groves are all male or all female.



***Prunus serotina*, black cherry, Rosaceae**

Leaves alternate, 2-5" long, lance-shaped, serrated. dark green and lustrous above, paler below

Flowers: small white flowers in narrow clusters 4-6" long, appearing in late spring.

Twig: pronounced bitter almond odor and taste

Bark: smooth with numerous short, narrow, horizontal lenticels when young, becoming dark black with orange interior, breaking up into small, rough, irregular, upturned plates when older.



***Quercus rubra*, northern red oak, Fagaceae**

Leaves alternate, 4-8" long x 4-6" wide, smooth underneath except the rusty hair tufts in vein axils, 7-11 pointed lobes separated by broad usually V-shaped shallow sinuses which extend less than halfway to the midribs, midribs of leaf red.

Flowers: monoecious, pale yellow-green, 2-4" long pendulous catkins.

Fruit: acorn.



***Tilia americana*, basswood, Tiliaceae**

Leaf: alternate, large 5-6" long, cordate to ovate.

Flower/Fruit: distinctive stalked bract.

Medium to large sized tree.



## CONIFERS

### ***Abies balsamea*, balsam fir, Pinaceae**

Single needled, smooth twigs; dark green foliage, strong aroma.

Needles less than 1", cones 1.5 – 2.5 in.

### ***Picea rubens*, red spruce, Pinaceae**

Leaf: needles, 1/2 to 5/8 inch long, sharply pointed and four-sided, tending to curve upwards, shiny yellow-green. woody peg (sterigma).

ovoid cone, 1 to 1 1/2 inches long; cones usually drop in winter.

### ***Pinus strobus*, eastern white pine, Pinaceae**

5-needles per bundle. Soft with bluish or grayish tint. 2-5 in. long, cones 3-8 in. long.

Fast growing, can shed limbs easily.

### ***Thuja occidentalis*, American arborvitae, Cupressaceae**

Foliage scale-like, browns slightly in winter.

Fruit is tulip-shaped

(Growing near Fern Trail in East Meadow)

### ***Tsuga canadensis*, eastern hemlock, Pinaceae**

Leaves 1/4-2/3 " long

Cones 1/2-3/4" long

Short, flat, blunt needles of different sizes on same branch.

Flexible branches give the tree a very graceful appearance.

Some terms for identifying our trees:

Opposite branching vs. Alternate branching

Simple leaves vs. Compound leaves

Compound leaves have leaflets along one large leaf.

Serrated - Leaf has knife like serrations at its edge.

Entire – Leaf has a smooth edge.

Perfect flower – flower has male and female flower parts (what you learned in high school.)

Imperfect flower – a flower with only male parts or only female parts.

This is important because of :

Monoecious: describes a plant which has both male and female imperfect flowers.

Dioecious: describes a plant which has only male flowers or only female flowers.