Identifying Common Trees
(how to impress your friends!)

What we will go over and do

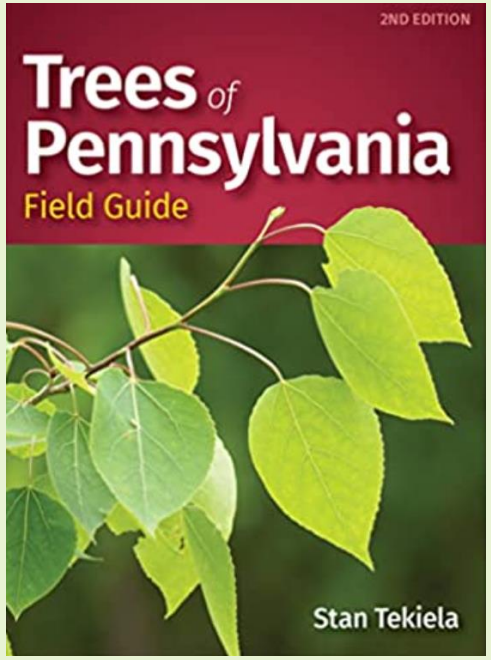
- How to identify common trees in our area
- Focus on native trees, also talk some about planted or invasive trees
- How trees can help explain local habitat and conditions
- Trees are just the biggest plants…shrubs, ground cover,m ildflowers, understory are cool too!
- Next – on Friday we walk and look/identify some trees – Zacharias Pond Park

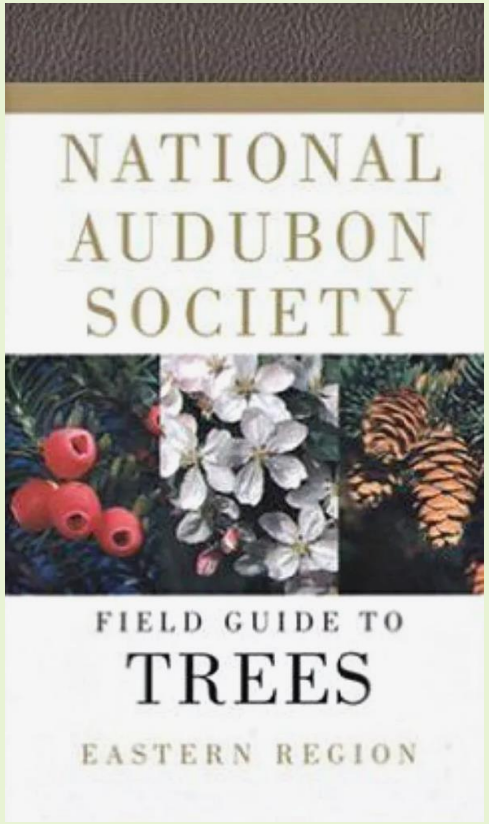
Steps for Identifying Trees

- Is it coniferous/evergreen vs deciduous/broadleaf?
  -conifers have needles, scale type leaves that stay on all year (mostly)
  -deciduous have broad leaves that fall off in the fall/winter (mostly)
- Is it wild or planted – some trees are only found in certain soil/wet/sun/shade conditions; planted can be found where people have changed the landscape

Steps for Identifying Trees

- The shape of the tree – esp. older mature trees
- Branching pattern
  -opposite vs alternate twigs
- Leaf type
  -simple/single leaf
  -compound leaf
- Seeds/cones
- Bark color and style
- The type of habitat the tree is found
- **Get a tree guide or app**





Steps for Identifying Coniferous Trees

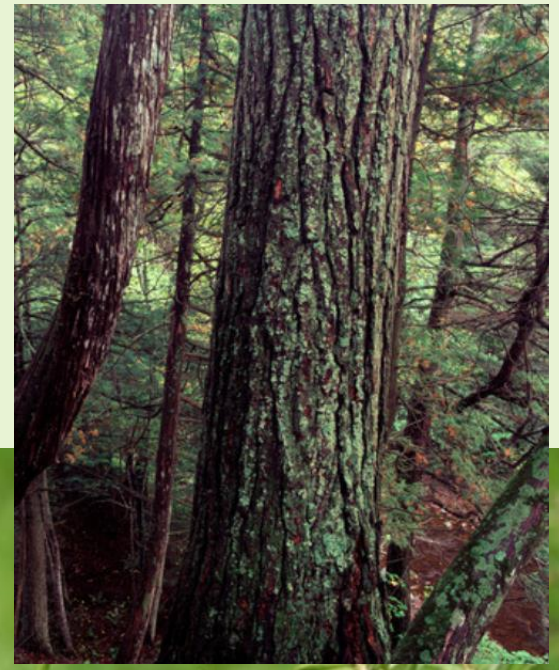
- Pine trees:
  -number of longer needles per bundle
- Hemlock/fir – flat short needles
- Spruce – 4-sided short needles
- Cedar – scale like 3-sided leaves

Eastern White Pine

- Most common native pine
- 5 needles per bundle, 2-4”
- Long cones, sap on tips
- Trunk is greenish/smooth when young, dark and fissured as old tree
- Found in all habitats; best in open, early colonizer, fast grower, but wood can be weak

Eastern Hemlock

- Common in damp woods, along streams, swamps, ravines
- Flat needles ½” long whitish underneath
- Small cones
- Slow grower but large/old, climax tree in ravines/edges of swamps



Eastern Red Cedar

- Medium sized tree often in open fields, deer browsed
- Scale-like 3 sided leaves
- Small roundish hard whitish-blueish – dark green berries (gin smell)
- Shreddy bark
- More common south of here

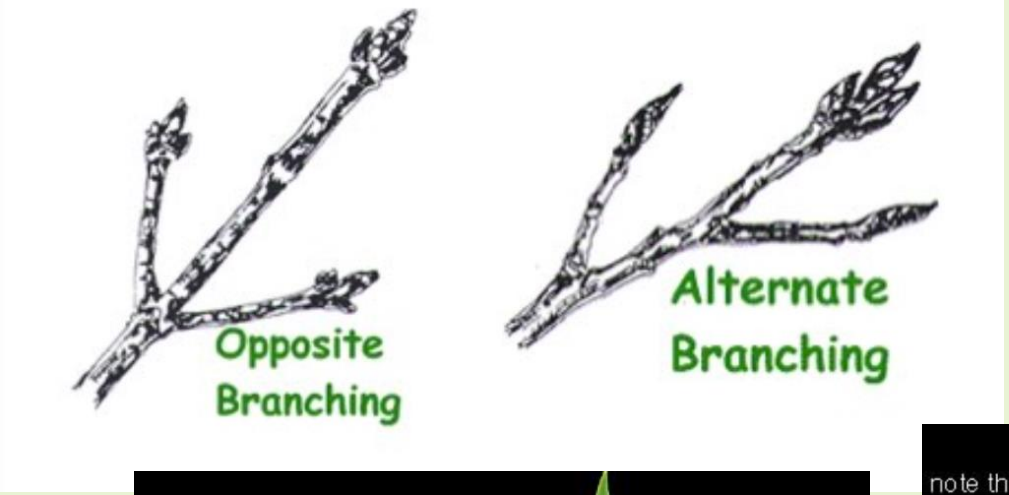
Common Ornamental Evergreens

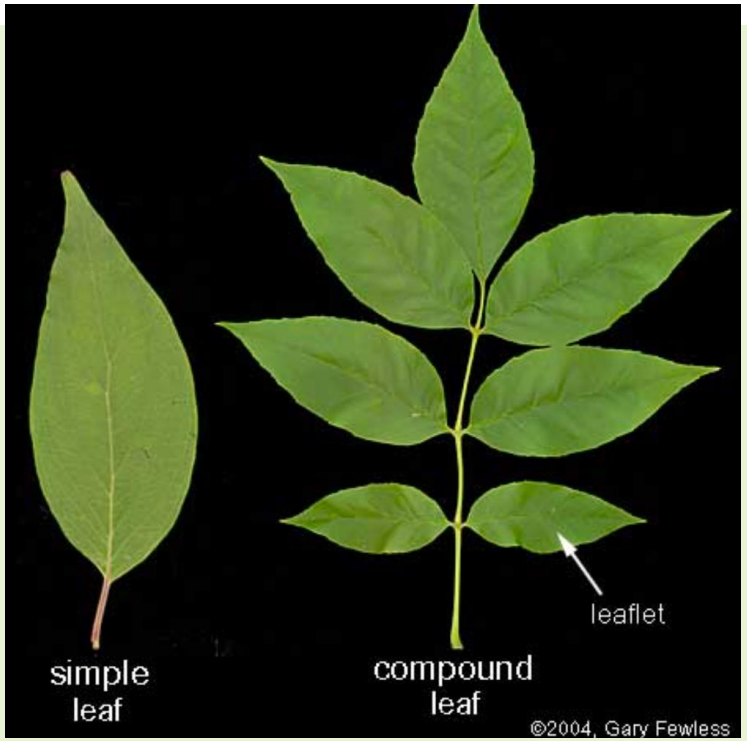
- **Norway Spruce**
  -easily identified by drooping branches
  -large cylindrical cones

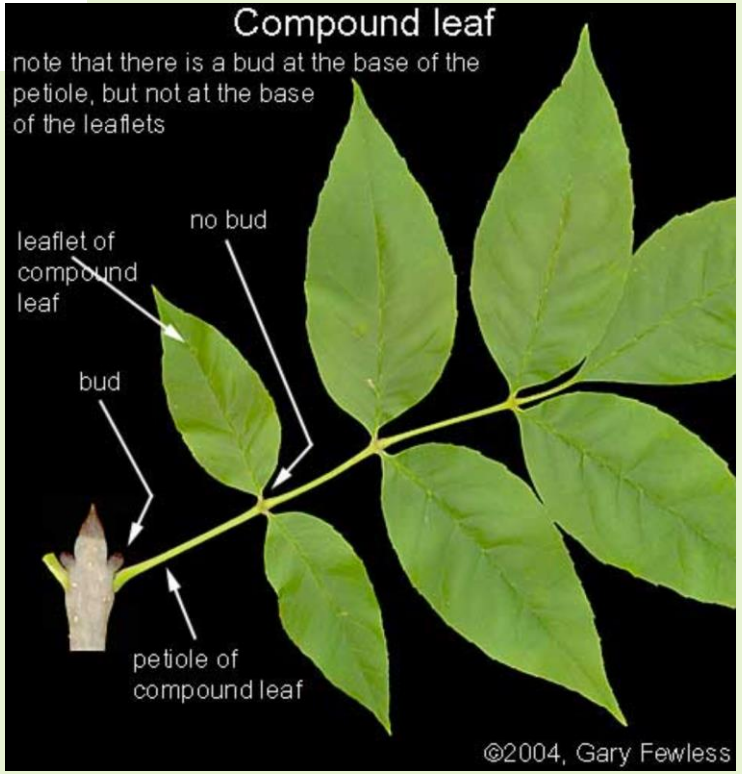
- **Colorado Blue Spruce**
  -greenish-blue needles/foliage, dense, rigid feel
  -common Christmas tree

Deciduous Tree Identification

- Simple, opposite
- Simple, alternate
- Compound, opposite
- Compound, alternate







Maples - simple, opposite
Red Maple

- One of the most common trees, not real tall
- Found in most habitats
- Leaves 3-lobed
- Brilliant red fall color
- Twigs/buds reddish
- Bark is silverish, smooth in younger trees, rougher and dark in older

Maples - simple, opposite
Sugar Maple

- Common tree, older are broad/tall and majestic
- Found in moist woods
- 5-lobed leaves, brilliant green/orange fall color
- Bark is dark brown w/ rough vertical grooves/ridges

Maples - simple, opposite
Silver Maple

- Less common maple tree, fast grower
- Found in wet, moist areas
- 5-deeply lobed leaves, yellow fall color
- Often long wispy twigs/branching
- Bark is greyish and flakes in older trees

Maples - simple, opposite
Norway Maple

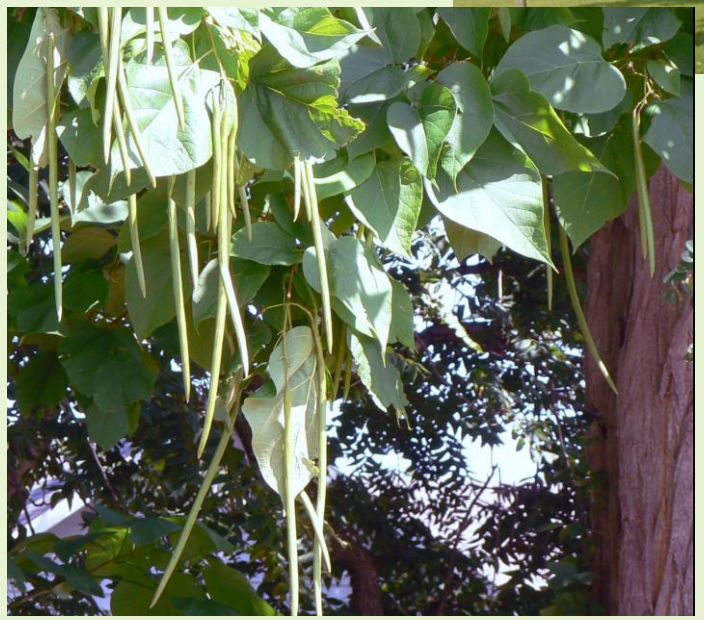
- Introduced maple found in cities
- Leaves similar to sugar maple, red leaf variety
- Leaf stalk has milky sap
- Bark is dark greyish and smoother/shallow fissures
- Can prevent growth under its canopy

Flowering Dogwood – Simple Opposite

- Smaller flowering tree
- Elliptic shaped leaves
- Alligator like bark
- Red fruit loved by birds
- Often in opening/edges of woods
- Ornamental (pink flowers)

Catalpa – Simple opposite

- Commonly planted in our area and has naturalized
- Leaves large heart-shaped 6-13”
- Has long seed pod later in summer (cigar tree)
- Can grow to large shade tree
- Native to the south



White/Green Ash - Compound Opposite

- White 5-9 leaflets, upland tree
- Green 5-9 leaflets, lowlands
- Twigs/fruit used to differentiate
- Bark darkish with tight interlocking fissures
- Dying off from emerald ash tree borer, look for blonding of bark

Simple Alternate

- Most common leaf type
- Includes:
  oaks
  birch
  aspen
  tulip tree/magnolias
  sycamore
  elm
  cherry and fruit trees

Oaks - Simple Alternate

- **2 general types**
  1. Red oaks – pointy leaf tips (red, black, pin)
  2. White oaks – rounded leaf tips (white, chestnut)
- Other oaks can be found in the region but not common in our area

Red Oak

- Common and similar to black oak
- Leaves 7-11 lobes, dull on top, thin, hairless
- Bark smoothish gray bark when young, long, flat-topped furrows when older; “ski slopes”
- Acorns – flatter bottom

Black Oak

- Tend to be larger trees than red oak
- Leaves 5-7 lobes, shiny on top, thicker, sort of hairy yellow/green underneath
- Bark dark, blocky, may have shiny ridges, inner bark is orange/yellow
- Acorns – pointy, larger cap

Pin Oak

- Medium sized tree, more common south, planted a lot, prefers wet areas
- Leaves 5-9 lobes, deep U-shaped opening between lobes
- Bark greyish-brown smooth young; low scaly ridges older
- Low hanging branches
- Acorns – stout, smaller cap
- Scarlet oak similar

White Oak

- Common oak, grows to large size
- Rounded 7-9 lobes
- bark on mature trees is light ashy gray in color, separating into small scaly plates
- Acorn caps cover a third or less of acorn

Chestnut Oak

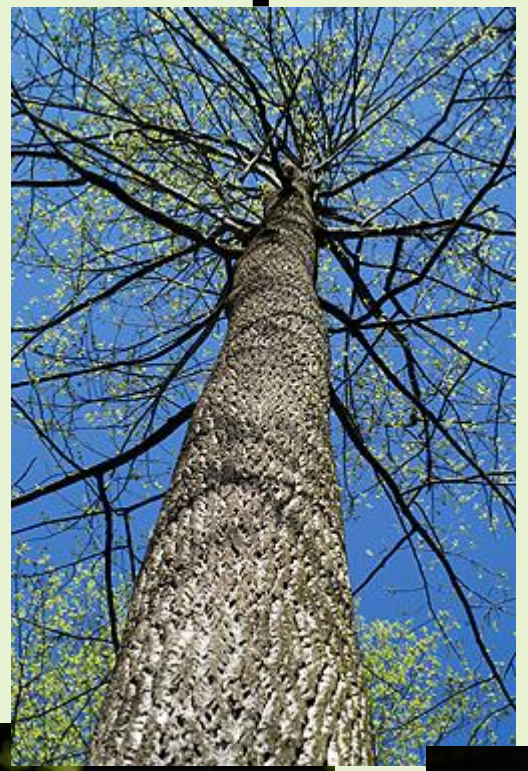
- Common oak on ridges, poor rocky soils
- Rounded 7-16 pairs of teeth (small lobes), deep green and leathery
- Bark is dark, deeply fissured, key identifier
- Acorn caps are a deep bowl shape and cover a third or more of acorn

American Sycamore – Simple alternate

- Majestic common tree often along streams/swamps
- Leaves 6-10” 3-5 lobes with spiny edges
- Distinctive brown-mottled bark with whitish under bark
- Hanging brown seed balls
- European London plane in urban areas – darker creamish color underbark

Tulip tree/poplar– Simple alternate

- Among tallest, straight, majestic trees; magnolia family, moist areas
- Leaves 3 to 4 lobes, green, waxy, and smooth on top
- tulip-like flower with greenish-yellow petals marked with orange at the base of each petal, higher on tree
- Bark flat-topped ridges and white colored furrows



Aspen– Simple alternate

- Two species: quaking and big-toothed
- Early successional tree, short lived, rapid growth
- Leaves heart-shaped
  quaking: smooth leaf edges
  big-toothed: “teeth” edges
- Spring caterpillar like catkins, cottony seeds
- Smooth, white/greenish white bark marked by black scars where lower branches fall off: older trees with furrowed bark

American Elm – Simple alternate

- Urban and forest tree; can be large and tall, drooping branches at ends
- Leaves 4" to 6"; rather thick, toothed on margin, veins very pronounced; bottom of leaf sides do not meet
- Bark Dark, ashy gray; divided into irregular, flat-topped, thick ridges
- Slippery elm in wet areas

Grey Birch – Simple alternate

- Often confused with white/paper birch, poor soils, open areas
- Leaves are up to 3" long and 2" across at the base; serrated along their margins, tips are elongated and tapering
- Bark is white to light gray with horizontal fissures; does not peel; black arrowheads at base of old branches

Black Birch – Simple alternate

- Common forest tree in area; twigs taste like birch beer
- Leaves 2-6” long with serrated margins
- Bark is dark smooth in young trees with horizontal stripes; older tree rougher/split bark
- Long catkins in spring

Yellow Birch – Simple alternate

- Forest tree often found with black birch; also has birch beer taste/sap
- Leaves 1-5” long, serrated edges, similar to black birch
- Bark is shiny yellow – silver grey, horizontal lines, peeling thin curls
- Catkins turn into cone-like seed fruit

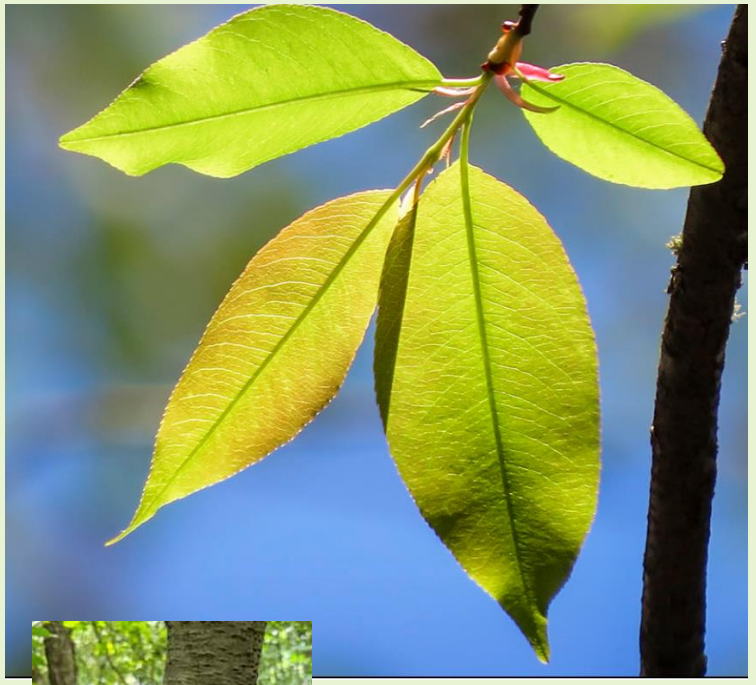
Other Birches – Simple alternate

- **White/paper birch**
  -found north of here
  -white-peeling bark

- **River birch**
  -found along rivers/streams
  -leaves can have larger serrations that other birches
  -bark can have salmony color, rougher/blocky in older trees

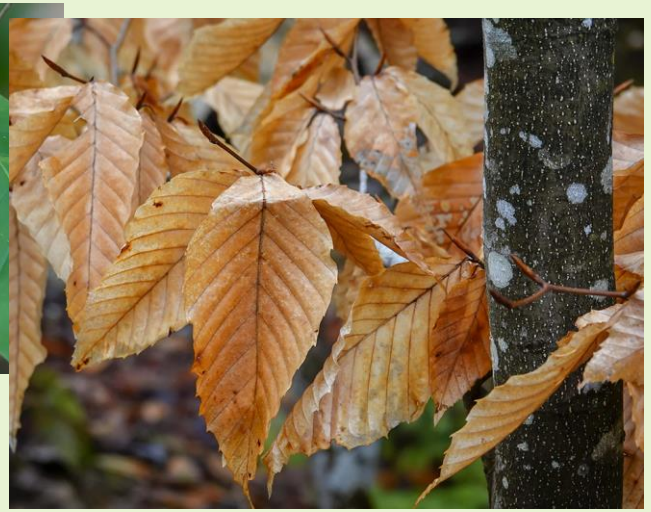
Black cherry – Simple alternate

- Common, rarely large, easy to spot having tent catepillars, black rot fungus
- Leaves 2-6” oblong very finely serrated
- White flower, long clusters, turn into black fruit clusters
- Bark smooth reddish-grey with horizontal lines as young; older is dark and rough
- Ornamental cherries….



American beech – Simple alternate

- Forest tree, climax species, can be tall and wide
- Leaves elliptical to 5”, coarsely toothed; leaves often stay on thru winter
- Distinctive smooth greyish bark (both young and old)
- Fruit is beechnut (1/4-1/2”)
- Initials carved in truck



Other Simple alternate

- **Redbud**
  -smaller tree, common ornamental, as wide as tall
  -leaves heart-shaped 3-5”, emerge reddish
  -known for spring pink-red flowers

- **Callery/Bradford Pear**
  -common ornamental with white spring flowers, considered invasive
  -rounded/teardrop-shaped, thick, waxy, 1½ to 3”, wavy edges
  -early spring white flowers, can be smelly

Compound alternate

Black locust - Compound alternate

- Fields and woods, fast growing, used as a wind break, pea family, native have spines on twigs
- Leaves have 6-20 leaflets, egg-shaped, ½-1”
- Bark dark, deeply fissured on older trees
- White clusters of flowers; fruit is 2-6” flat seed pod
- Ornamentals can be spineless

Honey locust - Compound alternate

- Fields and woods, fast growing, pea family, native have spines (1+”) on twigs and trunk
- Leaves have numerous narrow leaflets that may have leaflets on leaflets
- Bark dark, fissured/scaley with long spines often in a mass
- Small green clusters of flowers; fruit is 8-18” flat twisted seed pod
- Often an ornamental and spineless

Walnuts - Compound alternate

- **Black Walnut**: Large tree with stout trigs; in moist rich soils; most large trees have been cut.
- Leaves 7-17 narrow toothed leaflets often missing end leaflet
- Bark dark deeply grooved
- Nut is large round green ball, fragrant, turns brown

- **Butternut**: Similar to black walnut but smaller in size
- Leaves 7-17 narrow toothed leaflets having end leaflet
- Bark light gray/smooth on young trees, becoming shallowly furrowed with broad flat, ashy gray ridges
- Nut is large oblong green and hard to open

Shagbark Hickory- Compound alternate

- Tall tree easy to spot due to shaggy back; common in our region in upland forests
- Leaves have 5-7 leaflets (5 mostly)
- Nuts are up to 3”, husk splits as it dries, green
- Young bark is smooth
- Pignut hickory similar leaf

Other Hickories - Compound alternate

- **Mockernut** – smaller than shagbark
  -leaves 8-15” with 7-9 leaflets, orange smell when crushed
  -twigs stout and underneath of leaves hairy
  -fruit 1-2”, deep 4 channels on husk, dark red-brown as they mature
  -bark firm, low interlacing ridges/furrows



- **Bitternut** – can be a large tall tree
  -smaller leaves 7-12”, 7-11 leaflets
  -twigs more slender than other hickories mostly hairless
  -Fruit green, husk thin, ridged, smaller
  -Bark tight with fine smooth ridges




Ready to identify some real trees??
Friday June 20, 9:30-11:30

Thank you!