

Winter Tree I.D. Outline

1-1:25pm Powerpoint presentation

1:25-1:30pm Separate into three groups of 8 (#1 Mary, #2 Deanna & Jamela, #3 Danelle & Susan), Leaders distribute hand lenses and dichotomous keys at the trees

1:30-3pm Tree Walk Loop

1.) Savanna

- a. Bur oak (*Quercus macrocarpa*) aka mossycup oak or overcup oak
 - i. Fagaceae family (oaks and beeches)
 - ii. *macrocarpa* means large-fruited (acorns)
 - iii. Corky/wingy stems
 - iv. Bark is shallowly grooved, quite scaly
 - v. Buds often occur in clusters at the tip
 - vi. Note leaves still clinging to branches
 - vii. Kids: look for acorns with frilly cap, largest acorns of all the oak species
 - viii. Env: rich, moist soil, bottomlands, along streams

- b. Ohio buckeye (*Aesculus glabra*)
 - i. Hippocastanaceae family (horse chestnuts and buckeyes)
 - ii. Smiling cyclops leaf scar
 - iii. Unpleasant smelling twigs and leaves
 - iv. Look for leaf scars from palmately shaped leaves
 - v. Small-med sized tree
 - vi. Opposite branches
 - vii. Terminal bud looks like cigar tip
 - viii. Kids: look for buckeyes, seeds are poisonous to humans
 - ix. Lenticels
 - x. Example of bark on young/old trees next to each other in savanna
 - xi. Env: bottomland, banks of rivers and creeks

- c. American holly (*Ilex opaca*)
 - i. Aquifoliaceae family (primitive asterid flowering plants)
 - ii. 1 of 2 evergreen native trees
 - iii. Leathery, alternate leaves with spiny margins

- d. Sweetgum (*Liquidambar styraciflua*)
 - i. Hamamelidaceae family (witch hazel family)
 - ii. Kids: gumballs
 - iii. Bark has irregular furrows and rough rounded ridges

- iv. Shiny buds, sharp, taper to a point
 - v. Some have corky stems
- e. Flowering dogwood (*Cornus florida*)
- i. Cornaceae family (dogwood family)
 - ii. Short trunk with alligator-hide-like pattern, deeply checkered
 - iii. Terminal flower buds are clove-shaped
 - iv. Veg. buds resemble a dull cat claw
- f. Black walnut (*Juglans nigra*)
- i. Juglandaceae family (walnut family)
 - ii. Monkey-face leaf scar
 - iii. Kids: how animals contribute to seed distribution
 - iv. Diamond-shaped furrows, dark and deeply grooved
 - v. Buds covered w/short, grayish, silky hairs
 - vi. Terminal bud is much shorter than butternut bud, 1/4" to 1/3" long
 - vii. Dotted w/small lenticels

2.) S. Prairie firebreak

- a. Sycamore (*Platanus occidentalis*) because a "platypus occidentally" got the tree sick
- i. Platanaceae family (flowering plants, order Proteales "plane tree")
 - ii. Largest trees on site, massive
 - iii. Mottled/camouflage bark
 - iv. No terminal bud
 - v. Lateral buds reddish, resinous, single cap-like scale
 - vi. Zigzag twigs
 - vii. Wet environments
- b. Sassafras (*Sassafras albidum*)
- i. Lauraceae family (Laurel family)
 - ii. Buds pointing up
 - iii. Scratch and sniff bark – smells like fruit loops
 - iv. Colonizes, same root system, dioecious
 - v. Becomes coarsely ridged and furrowed, mature bark is red-brown
 - vi. Twigs green
 - vii. Sassafras tea: carcinogen
- c. Red buckeye vs. Ohio buckeye (point out)
- d. Black cherry (*Prunus serotina*)

- i. Rosaceae family
 - ii. Burnt potato chip bark
- e. Silver maple (*Acer saccharinum*)
 - i. One of the first to flower in spring
 - ii. Shaggy bark
- f. Butternut on corner near south prairie firebreak (*Juglans cinerea*)
 - i. Juglandaceae family (walnut family)
 - ii. Sloth face leaf scar
 - iii. Wider bark ridges, develops diamond-shaped pattern
 - iv. Buds coated with pale whitish-gray hair
 - v. Terminal bud 3/8" to 3/4" long, somewhat flattened
 - vi. Lateral buds smaller, ovoid

3.) South Woods

- a. Hackberry (*Celtis occidentalis*)
 - i. Ulmaceae family (elm family)
 - ii. Very distinctive corky bark
 - iii. Dark warty knobs that develop into irregular ridges
 - iv. No terminal bud
 - v. Lateral buds reddish-brown, slightly hairy scales, grow parallel to the twig
- b. River birch (*Betula nigra*)
 - i. Large examples by truck path
 - ii. Peely characteristic bark near the top, plates at the bottom
 - iii. Example of habitat factor: bottomlands, streambanks
- c. American elm (*Ulmus americana*)
 - i. Ulmaceae family (elm family)
 - ii. Forking buttress
 - iii. Peel some bark and show the red and white stripes for American elm vs red bark for red/slippery elm (*Ulmus rubra*)
 - iv. In the open, trunk is usually divided into several large, arching limbs with gracefully drooping branches
 - v. Flat-topped ridges separated by diamond-shaped fissures, often feel spongy when young

4.) Cabin

- a. Cottonwood (*Populus deltoides*)
 - i. Salicaceae family (willow/poplar family)
 - ii. Bark smooth, yellow-green when young
 - iii. Develops deep furrows
 - iv. Long-pointed buds
 - v. Named Clarence
 - vi. Kids: see how many kids it takes to form a chain around the tree
 - vii. Env: moist soil, bottomlands, stream banks

- b. Pawpaw (*Asimina triloba*)
 - i. Annonaceae (custard apple family)
 - ii. Shrub or small tree, 40ft
 - iii. Splotched with wart-like lenticels
 - iv. Great example of flower buds and leaf buds
 - 1. Chocolate fuzzy buds
 - 2. “paintbrush-like” tip extends up to 2/3”
 - v. Monoecious, but can’t self-pollinate

5.) Demo garden

- a. Small river birches (point out)
- b. American elm (vs. red elm)

- c. Kentucky coffeetree (*Gymnocladus dioica*)
 - i. Fabaceae family (pea family)
 - ii. Bark dark and scaly, deep fissures with scaly ridges, sharp-looking ridges
 - iii. Buds small and sunken, no terminal bud
 - iv. Large leaf scars, often thorny branches with orange pith
 - v. Leaf scars resemble a shield, 3 large dots
 - vi. Seed pods have 6 or more large, flat, dark brown, poisonous seeds
 - vii. Flaky/furrowed bark
 - viii. Zigzag branches
 - ix. Witch finger twigs

6.) Berm

- a. Musclewood (*Carpinus caroliniana*)
 - i. Betulaceae family (birch family)
 - ii. Small tree, up to 25ft
 - iii. Muscley, sinewy, light-gray bluish bark

- iv. Buds look like mini pine cones
- v. Thin twigs
- vi. A.k.a. American hornbeam, ironwood, blue beech

b. Redbud (*Cercis canadensis*)

- i. Fabaceae family (pea family)
- ii. Zigzag branches
- iii. Redder flaky bark
- iv. Zigzag branching
- v. Buds dark red to chestnut color, round, often in large clusters on older woody stems

c. Ozark witch hazel (*Hamamelis vernalis*)

- i. Hamamelidaceae family (witch hazel family)
 - 1. *Hama* = at the same time
 - 2. Melon = apple or fruit
 - 3. *Vernalis* = spring bloom
- ii. Flowers in Feb. – fragrant, pale yellow to dark reddish purple
 - 1. *H. virginica* blooms in Oct.
- iii. Golden-yellow fall color
- iv. Outwardly spreading branches
- v. Env: gravelly stream beds, bases of rocky slopes, rocky wooded hillsides
- vi.

7.) Wet berm

a. Persimmon (*Diospyros virginiana*)

- i. Ebenaceae (ebony family)
- ii. Point out square bark of persimmon vs dogwood
- iii. Small black buds, ovoid, pointed, dark brown, 2-scaled
- iv. Burnt charcoal bark, blocky, nearly black, regularly cracked bark
- v. Zigzag, grayish to reddish brown, slender
- vi. Leaf scars broadly crescent shaped w/solitary bundle scar
- vii. Example of habitat factor: found on edges

8.) Truck path

a. Bald cypress (*Taxodium distichum*)

- i. Cupressaceae family (cypress family)
- ii. Nonevergreen tall tree
- iii. One of 3 native conifers in MO, but it loses its needles in the winter (other 2 are shortleaf pine and eastern red cedar)
- iv. Example of habitat factor: found in moist soil, bottomlands
- v. Trunk base often deeply ridged
- vi. Bark color example, fibrous

3pm Wrap up – end at Glass House