

## LAB 5 – GASSAWAY ROAD

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**post oak** Fagaceae *Quercus stellata*

**Leaf:** Alternate, simple, oblong, 6 to 10 inches long, with 5 lobes, the two middle lobes are distinctly square, resulting in an overall cruciform appearance, thickened texture; green above with scattered stellate pubescence, pubescent and paler below.

**Flower:** Monoecious; male flowers are yellow-green, borne in naked, hanging catkins, 2 to 4 inches long; female flowers are reddish and appear as single, short spikes from leaf axils, appearing with the leaves.

**Fruit:** Acorns are 1/2 to 2/3 inches long and ovoid; cap is bowl-shaped and warty/scaly, covering 1/3 to 1/2 of the nut; Individual scales are more apparent than white oak; maturing in one year and ripening in the fall.

**Twig:** Gray or tawny-tomentose and dotted with numerous lenticels; multiple terminal buds are short, blunt, orange-brown, somewhat pubescent, short, thread-like stipules may be present.

**Bark:** Ashy gray and initially quite scaly, later becoming more blocky and ridged, very similar to white oak.

**Form:** A small to Medium sized tree up to 65 feet tall with a crown that has gnarled and twisted branches.



**Notes:**

**bluejack oak** Fagaceae *Quercus incana*

**Leaf:** Alternate, simple, narrow elliptical, broadest above the middle, 2 to 4 inches long, 1/2 to 1 inch wide. The leaves may have some shallow bristle tipped lobes at the tip, bluish gray above and white woolly below.

**Flower:** Male flowers are yellow-green long catkins (2 to 3 inches long), females are green to reddish, very small spike in leaf axils, appearing with the leaves.

**Fruit:** Acorn, round nut 1/2 inch in diameter, brown; cap usually shallow but may cover up to 1/3 of nut, scales thin.

**Twig:** Slender, initially quite hairy and light brown, later becoming hairless and darker, buds are sharp pointed, reddish brown, typically clustered at branch tips.

**Bark:** Dark often nearly black, quite blocky, becomes rough quite early.

**Form:** Small tree, often only a shrub, to 30 feet, very poor form with numerous dead branches.



**Notes:**

**blackjack oak** Fagaceae *Quercus marilandica*

**Leaf:** Alternate, simple, 5 to 8 inches long, thickened, with 3 shallow, bristle-tipped lobes near the end of the leaf, upper surface lustrous green, lower surface paler with orange-brown pubescence.

**Flower:** Monoecious; males 2 to 4 inch long hanging catkin, females small, single or paired.

**Fruit:** Acorn, nut 3/4 inch long often striated, light brown, cap covers about half of the nut and is covered with loose, hairy scales.

**Twig:** Stout, dark brown and scruffy-hairy, reddish brown buds are 1/4 inch long, sharp, angled and fuzzy.

**Bark:** Very dark (almost black), rough, with blocky plates and splits.

**Form:** A small sized tree (20 to 30 feet tall) generally with poor form. It typically has a short trunk with a round crown made up of twisted limbs.



**Notes:**

**chittamwood** Sapotaceae *Sideroxylon lanuginosum*

**Leaf:** Alternate, elliptical or obovate, 1-3 inch long, entire margin, rounded tip and tapering base, dark green, shiny-glabrous above with white-gray, felt-like hair below; clustered or whorled on lateral spur shoots.

**Flower:** Species is monoecious; inconspicuous, white, in small clusters, sweet and fragrant, open mid-summer.

**Fruit:** Blue to black berries, oval in shape, edible, ripen in the fall.

**Twig:** Slender, gray or rusty-hairy, often armed with thorns at the tips.

**Bark:** Gray to brown, becoming darker with age.

**Form:** Small tree up to 40 feet in height with an open crown and branches growing close to the ground. \*text and photos courtesy Oana Popescu and Carol Loopstra, Texas A&M



**Notes:**

**sassafras** Lauraceae *Sassafras albidum*

**Leaf:** Alternate, simple, pinnately veined, ovate to elliptical, entire, 3 to 6 inches long with 1 to 3 lobes; the 2-lobed leaf resembles a mitten, the 3-lobed leaf resembles a trident; green above and below and fragrant when crushed.

**Flower:** Dioecious; small but quite showy, both male and females are bright yellow-green, borne in 2 inch racemes appearing in early to mid-spring.

**Fruit:** Dark shiny blue, ovoid, fleshy drupes (1/3 inch long) that are borne in a red cup attached to a red stalks, held upright, maturing late summer.

**Twig:** Slender, green and sometimes pubescent, with a spicy-sweet aroma when broken; buds are 1/4 inch long and green; twigs from young plants displayed at a uniform 60 degree angle from main stem.

**Bark:** Brown, with cinnamon-brown inner bark, becoming coarsely ridged and furrowed; when cut the spicy aroma is obvious.

**Form:** Small to medium sized tree up to 60 feet tall with an irregular often twisted trunk and main branches, usually flat-topped crown; root suckering may result in thickets.



**Notes:**

**Louisiana yucca** Agavaceae *Yucca louisianensis*

**Leaf:** Evergreen, stiff and sword-like to slightly flexible and strap-like, up to 2 1/2 feet long and 1 to 3 inches wide, parallel veins, the leaf margins of younger leaves bearing fibrous white strands or filaments.

**Flower:** Very attractive, creamy white, bell-shaped, 6-petaled, approximately 2 1/2 inch-wide, borne on a 3-6 foot tall upright woody inflorescence. Flowers appearing once between June and August.

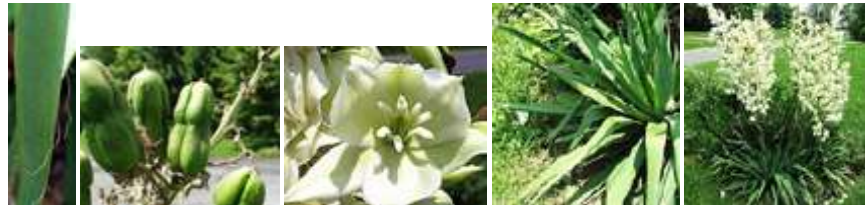
**Fruit:** Capsules borne upright on the woody inflorescence, approximately 2 inches long, initially green and drying to brown.

**Twig:**

**Bark:**

**Form:** Dense, mounded clumps of leaves that reach 3 feet in height, but with upright inflorescences much taller.

\*Modified from VT Fact Sheet for *Yucca filamentosa*



**Notes:**

### black hickory Juglandaceae *Carya texana*

**Leaf:**Alternate, pinnately compound, 8 to 12 inches long, with 7 (sometimes 5-9) leaflets, leaflets are lanceolate and serrate, rachis slender and glabrous, green above and paler below.

**Flower:**Monoecious; males are yellow-green, drooping catkins, with three hanging from one stalk, 2 to 3 inches long; females are very short and found in clusters at the end of the branches, both appear in spring.

**Fruit:**Obovoid to pear-shaped, 1 to 2 inches long, with a thin husk that only partially splits upon maturation; nut is not ribbed, fairly round but flattened, seed is somewhat bitter; ripening in early fall.

**Twig:**Moderately stout to slender (when compared to the other hickories); leaf scars are 3-lobed to cordate - best described as a "monkey face"; terminal bud is small (1/4 inch), ovate and covered in yellow-brown pubescence.

**Bark:**Very dark with flattened scaly ridges or blocky appearance.

**Form:**A medium sized to large tree capable of reaching over 100 feet tall, with a rounded crown and a straight trunk.

\*Modified from VT fact sheet for pignut hickory. Photos © Jeremy Stovall.



**Notes:**

### white fringetree Oleaceae *Chionanthus virginicus*

**Leaf:**Opposite or sometimes partially opposite, simple, ovate to elliptical, 4 to 8 inches long, pinnately-veined in shape with an entire margin, somewhat thickened, green above and paler below.

**Flower:**Dioecious or polygamo-Dioecious; very showy, 1 inch long with a 4-lobed, white corolla, very fragrant, with many hanging from a long, 4 to 8 inch stalk (resemble a long white beard); appear in late spring.

**Fruit:**Ovoid drupe, 3/4 inch long, dark blue to nearly black with a fleshy pulp that encloses a large, stone seed, ripen in late summer.

**Twig:**Moderately stout, ashy-gray in color, smooth or downy, with scattered warty lenticels; large, brown, broadly conical terminal bud; leaf scar with one bundle scar.

**Bark:**Dark gray-brown in color, becoming somewhat furrowed with reddish scales.

**Form:**A small tree or a large suckering shrub reaching up to 25 feet tall with opposite branches, a short trunk and a narrow, oblong crown.



**Notes:**

**winged sumac** Anacardiaceae *Rhus copallinum*

**Leaf:** Alternate, pinnately compound, up to 12 inches long, 7 to 15 leaflets per leaf; leaflets are lance-shaped, with entire margins, rachis has prominent wings between the leaflets, shiny, dark green above, paler and a bit fuzzy below.

**Flower:** Monoecious; greenish-yellow and small, borne on 3 to 5 inch wide, terminal pyramid-shaped panicles in mid to late summer.

**Fruit:** A dark red, round drupe borne on terminal cluster, 1/8 inch long, covered with short, sticky, red hairs; matures in fall but present through winter.

**Twig:** Medium-textured, speckled with lenticels, and covered with fine, velvety, reddish brown hair; buds are small, rounded and hairy, leaf scars horseshoe-shaped.

**Bark:** Light brown or gray, smooth with numerous lenticels when young, later with large, thin scales.

**Form:** A small tree or large shrub up to 25 feet with a short trunk and spreading branches.



**Notes:**

**pricklypear** Cactaceae *Opuntia spp.*

**Leaf:** Reduced to a spine, less than ¼ inch on spineless form, considerably longer on spined form, many per areole, areoles 1 to 2 inches apart.

**Flower:** Yellow to red, three inches, late spring to early summer, born along the edges of the joints.

**Fruit:** Barrel-shaped, fleshy, unarmed or armed with very short spines, yellow-green ripening to purple, to 3 inches, maturing late summer.

**Twig:** Segmented, each segment broad and flat, oval to round in shape, to 10 inches long and less than one inch thick, often described as a "beaver tail".

**Bark:**

**Form:** Shrubby, to a height of 3 to 12 feet, forming wide-spreading clumps.

\*Modified from VT Fact Sheet for *Opuntia engelmannii* using info from Vines' Trees of East Texas ISBN: 0292780176



**Notes:**



### fragrant sumac Anacardiaceae *Rhus aromatica*

**Leaf:** Alternate, 3 large toothed leaflets, 3 to 5 inches long, terminal leaflet short-stalked, dull dark green above, paler below, fragrant odor when crushed.

**Flower:** Quite small, greenish yellow, in small round clusters; appearing in late spring to early summer.

**Fruit:** Round cluster of reddish brown, fuzzy drupes, each 1/4 inch across, ripen in mid to late summer.

**Twig:** Slender, brown, finely fuzzy, buds small and yellowish brown surrounded by a circular leaf scars. Flower buds occur in conspicuous, tight catkin-like clusters.

**Bark:** Gray-brown and tight, initially smooth with obvious lenticels, later developing peeling splits.

**Form:** Short sprawling shrub 2 to 4 feet tall.



**Notes:**

### tree sparkleberry Ericaceae *Vaccinium arboreum*

**Leaf:** Alternate, simple, entire or finely serrated margin, oval to oblong, 1 to 2 1/2 inches long, leathery, nearly evergreen, very shiny green above, dull and paler below.

**Flower:** Small (1/3 inch), white, bell-shaped, occur in small clusters, appearing in mid-spring.

**Fruit:** Round, dry berry (1/4 inch diameter), shiny black when ripe in fall.

**Twig:** Slender, zigzag, red or green turning grayish brown, small leaf scar with one bundle scar, maybe scruffy fuzzy.

**Bark:** Shreddy and patchy with reds, browns and grays present.

**Form:** Large shrub or small tree that can reach 30 feet tall. Champion sparkleberry is 1.4 feet in diameter.



**Notes:**