

Order	Common Name	Scientific Name	Characteristics	Location	Grid	Notes
19	Persimmon	<i>Diospyros virginiana</i> (<i>Ebenaceae</i>) <i>Diospyros</i> refers to edible fruit	Bark: grey-black med-sized platelet, deep fissures (like charcoal) Leaf: alternate, simple, entire, 2-5 inches long, matte; deciduous Twigs: prominent grey lenticels Buds: black, axillary Flower: dioecious, 1/2 inch, white to yellow, late spring Fruit: large edible berry in the fall, 3/4 to 2", yellow/orange when ripe	N entrance to Dogwood Trail Opposite Garden of Hope parking; S of Fort/sandcastle	K6 L10	40-60 ft; asymmetrical crown; found on high/dry sites (taproot); slow growing; fall color - yellow to orange; birds like the fruit; hard wood used for golf clubs, billiard cues
20	Flowering dogwood	<i>Cornus florida</i> (<i>Cornaceae</i>) <i>Cornus</i> = hard (wood) <i>florida</i> (<i>flos</i>) = flower	Bark: very small shallow "boxy" platelets Twig: green or reddish turning gray, white pith Leaf: opposite, simple, entire, 3-5", broadly elliptic w/pointed tip, parallel veins curve toward leaf tip; deciduous Flower Buds: very round, scaly, held on up-turned twigs Flowers: monoecious, tiny yellow/green tightly-packed cluster inside 4 large, notched, white or pink bracts (modified leaves); before leafout Fruit: 1/4" shiny red oblong drupe, held in clusters on stalks; fall	N entrance to Dogwood Trail S of Demonstration Vegetable Garden; W of Garden of Hope	K6 L10	15-40 ft; understory native to E USA; often has spreading/layered crown - less symmetrical in forest than in cultivation; fall color - reddish-purple; cultivars - white, pink, red bracts; Kousa dogwood (Asia)
21	Mulberry spp. Red, (White - non-native)	<i>Morus rubra</i> (<i>Moraceae</i>) <i>Morus</i> = mulberry <i>rubra</i> = red	Bark: gray-brown, long, scaly ridges; orangish on young trees Leaf: alternate, simple, 3-5", serrate margin, no lobes to several lobes, rough texture, deciduous Flower: dioecious, small, pale-green catkins 1-2" long, late spring Fruit: resembles blackberries, cylindrical, 1 to 1-1/4" long, fleshy multiples of drupes each containing a seed, mature in summer	W end of Gnome Garden	K6	up to 60 ft tall; fall color - yellow; white mulberry similar, leaves smooth on top, prominent veins, white to purple fruit (silkworms)
22	Eastern white pine	<i>Pinus strobus</i> (<i>Pinaceae</i>) <i>strobus</i> = pitchy (cone)	Bark: young tree - thin, smooth, gray-green; becoming thick, reddish-brown to gray-brown with ridges and furrows Leaf: evergreen needles, 3-5" long, 5 needles per fascicle, appear blue-green Flower: monoecious, male cylindrical, yellow, near branch tips, female light green, red-tinged, ends of branches Fruit: cone 4-7" long, cylindrical, long stalk, late summer	Service road SE of greenhouses	L5	50-80 ft; estimate age from # of branch whorls
23	Loblolly pine	<i>Pinus taeda</i> (<i>Pinaceae</i>) <i>taeda</i> = resinous	Bark: large, grey-brown platelet with deep fissures Twigs: purple new growth Leaf: 3 needles per fascicle (rarely 2), slender, stiff, often twisted, 6-9" long, .5-1" long bundle sheath, clustered at tips of branches; evergreen Fruit: monoecious, up to 2-6" cone, light brown, ovoid, often stalk-less, backward pointed prickles, retained for multiple seasons	Service road along west-central Dogwood Trail N end upper Dogwood Trail	M6 L6	80-100 ft tall; native to SE USA: prefers low/moist sites, but is adaptable to wide range of conditions; taproot; southern yellow pine; commercially important
24	Shortleaf pine	<i>Pinus echinata</i> (<i>Pinaceae</i>) <i>echinata</i> - prickly cone scales	Bark: grey-brown, small platelet with moderately deep fissures Twigs: purple new growth Leaf: usually 2 (sometimes 3) needles per fascicle, needles up to 4", 1/4" bundle sheath, clustered at tips of branches; evergreen Fruit: monoecious, (1)- 3" cone, grey-brown, stalked, clustered, short prickles, retained for a long time	Service road along west-central Dogwood Trail N end upper Dogwood Trail	M6 L6	70-100 ft tall; native to SE USA; taproot; susceptible to southern pine bark beetle; southern yellow pine

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25	Southern red oak	<i>Quercus falcata</i> (Fagaceae) <i>falcata</i> = sickle-shaped (leaf)	Bark: grey-brown lumpy ridge & furrow Leaf: alternate, simple, 4-9" long, (3)-5 narrow lobes with bristle tips, widest in middle, shiny green above/rusty-grey & fuzzy beneath, <i>bell shaped base, leaves droop</i> ; deciduous Fruit: .5-.75" round acorn, shallow cap w/hairy scales, tapers on short stalk to twig, held singly or in pairs, fall	Mid-N end upper Dogwood Trail	M6	50-80 ft tall; SE USA; med-sized oak w/tall trunk & high crown; red oak group; fall color - yellow/brown
26	Scarlet oak	<i>Quercus coccinea</i> (Fagaceae)	Young Bark: gray-brown with smooth streaks Mature Bark: darker, irregular broad ridges and narrow furrows Leaf: alternate, simple, 3-7" , oval with very deep sinuses, bristle-tipped lobes, shiny green above, paler and glabrous below; deciduous Flower: monoecious; males are yellow-green catkins; females short axillary spikes, during leaf-out Fruit: .5-1" acorns, held singly or pairs, cap covers 1/2 of nut, cap scales shiny, tip of acorn may have concentric rings or fine cracks; fall	Mid-upper Dogwood Trail	M6	60-80ft; dry uplands in the Appalachian Mountains; narrow irregular crown, often has buttressing roots; red oak group; fall color - scarlet
27	Winged elm	<i>Ulmus alata</i> (Ulmaceae) <i>alata</i> = winged (twigs)	Bark: grey-brown, shallow ridge & furrow irregular corky layers (smoother than <i>U. rubra</i>) Leaf: alternate, simple, doubly serrated, 2" long, inequilateral base; deciduous Twigs: grey-brown, hairless, zig-zag, often have corky wings Buds: pointy, redish, before leaf-out Flower: monoecious, perfect, apetalous, inconspicuous Fruit: single round papery samara, held in clusters, on a short stalk	S end upper dogwood trail, E side of trail	N6	40-60 ft; most common elm; prefers low/moist sites but will adapt to high/dry; susceptible to Dutch elm disease (vascular fungal disease, bark beetle vector); fall color - yellow
28	Post oak	<i>Quercus stellata</i> (Fagaceae) <i>stellata</i> = covered with stars (leaf hairs underneath)	Bark: light grey to red-brown, scaly, finely fissured Twig: yellow hairs when young, darker & shed with age Leaf: alternate, simple, 5-7 lobes, 2 middle lobes rectangular, make leaf look like a cross, leathery, shiny, dark green; deciduous Fruit: round acorn, .5-1", cap cap covers 1/2 of acorn	Hosta Garden, S end Dogwood Trail	N6	30-60 ft tall; range: SE USA to TX; short trunk w/dense gnarled branches; white oak group; fall color - reddish-brown
29	Chinkapin oak	<i>Quercus muehlenbergii</i> (Fagaceae)	Bark: flaky-scaly, very light grey, checkered knobs Twig: black axillary bud Leaf: alternate, simple, obovate, thin, crenate, 10-14 pairs of rounded "teeth" curve toward tip, tiny gland on the tip of each crenation (not a bristle), glabrous (not fuzzy); deciduous Flower: monoecious; male flowers are yellow-green catkins 3-4"; females are green-reddish, very small in leaf axils, after leaf-out Fruit: acorn .5-1" long, ovoid, thin bowl-shaped cap covers about 1/3 of acorn, tattered fringe on cap margin, dark brown when mature	Hosta Garden, S end Dogwood Trail	N6	40-80 ft tall; mid to E USA; AKA Yellow oak; white oak group; fall color - poor
30	Water oak	<i>Quercus nigra</i> (Fagaceae) <i>nigra</i> = black	Bark: shallow ridge & furrow, brown-grey Twig: slender, red-brown; buds short, sharp-pointed, angular, red-brown, multiple buds at the tip Leaf: alternate, simple, 2-4"long by 1" wide, variable in shape spatulate to lanceolate (0-3 lobes), glabrous, retained; deciduous Flower: monoecious; male catkins; female spikes, at leaf-out Fruit: small 1/2" acorns, very dark color, 1/3 covered by a flattened cap with appressed scales, maturing in fall of the 2nd year	East-central Dogwood Trail	M6	50-80 ft tall; SE USA; med-sized oak w/tall trunk & high crown red oak group; fall color - green and dead leaves retained until late winter

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