

Order	Common Name	Scientific Name	Characteristics	Location	Grid	Notes
43	Eastern redbud	<i>Cercis canadensis</i> (<i>Fabaceae</i>) (formerly <i>Leguminosae</i>)	Bark: grey-brown & smooth when young; rough, dark grey ridge & furrow - scaly when older, red inner bark Leaf: alternate, simple, entire, cordate (heart-shaped), matte; decid. Twigs: slender, zig-zag, smooth, dark with lighter lenticels Buds: tiny, held tightly to limbs Flower: monoecious, perfect, showy, held on short stalks, pink-purple, rounded pea-like, before leaf-out Fruit: flat pod 2-4 inches long, maturing late summer	Opposite Garden of Hope parking; S of Fort/sandcastle	M10	20-40 ft; one to several trunks; broad, rounded, irregular canopy, asymmetrical branching; low/moist sites, short lived; fall color - yellow to yellow-green
44	American beech	<i>Fagus grandifolia</i> (<i>Fagaceae</i>) <i>Fagus = edible (nuts)</i>	Bark: thin, smooth, silvery-gray Leaf: alternate, simple, pinnately veined, tooth at end of each vein Twig: slender, zig-zag, light brown slender pointed buds Flower: monoecious, male flowers on globose heads, female flowers on short spikes, appear after leaves in spring Fruit: nuts are irregularly triangular, shiny brown, edible, in pairs, woody husk covered with spines, 1/2 to 3/4 inch long, fall	E of (across stream from) Fern Glade	M9	up to 100 ft; thickets produced by root suckering; shade-tolerant; leaves persist into winter; fall color - yellow/bronze
45	Sugarberry	<i>Celtis laevigata</i> (<i>Cannabaceae</i>) (formerly <i>Ulmaceae</i>) <i>laevigata = smooth/slippery</i>	Bark: smooth & warty <i>all the way to the base of the tree</i> Leaf: alternate, simple, ovate, entire to singly serrated, inequilateral base, light green, 3 prominent veins; deciduous Flower: monoecious, green, in clusters after leaf-out, inconspic. Fruit: 1/4" orange, red, or purple drupe (depending on ripeness)	Fern Glade	L9	60-80 ft; short, straight trunk; often gets insect galls; SE USA, stream banks, rocky slopes; bark smoother than hackberry, no ridges; fall color- pale yellow
46	American sycamore	<i>Platanus occidentalis</i> (<i>Platanaceae</i>) <i>platanus = broad/flat</i>	Bark: thin, mottled brown, green, tan, and white, older stems gray-brown and scaly (camouflage bark) Leaf: alternate, simple, palmately veined, 3 to 5 lobes, 4-8 inches wide, margins coarsely toothed, petiole bases encircle/enclose buds Twigs: zig-zag, stout, orange-brown, leaf scar surrounds bud, stipule scar surrounds twig Flower: monoecious, very small flowers, dense round clusters Fruit: spherical ball of achenes (tiny winged seed) on 3-6 inch stalk	Fern Glade	L9	up to 100 ft; 50-70 ft wide; found along streams and rivers; fruit persistent into winter; fall color - brown to yellow-green
47	Fringetree	<i>Chionanthus virginicus</i> (<i>Oleaceae</i>) <i>Chion = snow, anthus = flower</i>	Young Bark: smooth w/prominent lenticels, grey Mature Bark: smooth & fissured to scaly, grey-brown Leaf: opposite, simple, entire, 4-8" narrowly-elliptic, pointed or rounded tip, wavy margin, prominent veins; deciduous Flower: usually dioecious, 1" white w/4-6 linear petals in bell shape, in 3's hanging loosely from 4-8" downy stalks, fragrant, spring Fruit: 1/2-1" oblong drupe, blue-black, fall	Fern Glade, adj. to pond	L9	20-30 ft; SE coastal states; often multi-trunked; fall color - yellow in the northern end of its range, may drop green leaves in southern end of range
48	Mockernut hickory	<i>Carya tomentosa</i> (<i>Juglandaceae</i>) <i>tomentosa = hairy</i>	Young Bark: smooth, grey; Older Bark: grey, narrow/shallow to prominent ridge & furrow w/irregular interlacing (diamond pattern) Twig: thick & velvety Leaf: alternate, odd-pinnately compound, (7)-9 rounded leaflets, terminal leaflet is largest, fine serrations, rachis & leaflets very pubescent (fuzzy), fragrant when crushed; deciduous Bud: big imbricate (overlapping scales) terminal bud, Flower: inconspicuous, honey colored, monoecious Fruit: 1-1/2 to 2 inch nut surrounded by a thick, very hard round 4-seamed husk, early fall	between Hammocks and Nature Trail, on the Shade Border	L8	60-80ft; taproot; native to dry upland to intermediate sites from New England to SE; long lived (200-400 yrs); fall color - golden yellow; typical hickory used in smoking or grilling meat
49	American hornbeam Ironwood, Blue Beech, or Musclewood	<i>Carpinus caroliniana</i> (<i>Betulaceae</i>)	Bark: short, slender trunk, w/smooth, muscular bark, very light grey Twig: slender, zig-zag, brittle Leaf bud: reddish-brown, pointed, scaly Leaf: alternate, simple, doubly-serrate, elliptic w/ abruptly pointed tip, prominent strait (non-branching) side veins, matte dark blue-green above, paler w/ fuzzy vein angles beneath; deciduous Flower: monoecious, catkins, spring Fruit: .25" ribbed nutlet, paired, cluster w/narrow lobed leafy bracts	mid-Nature Trail, S of Dene's Pine sculpture	M8	15-30 ft; E USA; very dense hard wood ~40lbs/cu ft; not commercially viable due to small size and slow growth; excellent understory tree for dense shade; fall color - yellow to red

Order	Common Name	Scientific Name	Characteristics	Location	Grid	Notes
50	Possumhaw holly Deciduous holly	<i>Ilex decidua</i> (Aquifoliaceae)	Bark: smooth, light grey, prominent round lenticels Twig: <i>light-silvery grey, hairless</i> Leaf: alternate, simple, rounded-serrations, 1-3" obovate-narrow elliptic w/blunt tip, matte (<i>not glossy</i>) upper leaf surface, hairy veins underneath; deciduous Flower: dioecious, inconspicuous, .25" white, 4-5 <i>non-fringed</i> smooth rounded petals, held on slender stalk in clusters at ends of twig <i>spurs</i> , spring Fruit: shiny 1/3 " red drupe in clusters (racemes) <i>on bare twigs</i> in the fall, <i>often persisting through winter</i>	mid-Nature Trail	M8	5-25 ft, usually shrubby form; native to lowland mixed-broadleaf forests in SE-central USA; spreading crown of stout branches; fall color - brownish-yellow
51	American holly	<i>Ilex opaca</i> (Aquifoliaceae) <i>opaca = not glossy</i>	Bark: smooth to rough/warty, light grey Leaf: alternate, simple, coarse prickly margins, elliptic, dull green top/yellow-green beneath, thick 2-4" long with pointed tip; evergreen Twig: young twigs hairy becoming smooth with age, brown or grey Flower: dioecious, inconspicuous, .25" waxy blooms with 4 rounded greenish-white petals, held in clusters in leaf axils, spring Fruit: .25" oblong drupe, green maturing to red, in clusters, persistent, fall	Nature Trail, near wooden bridge	N8	20-50 ft; narrow rounded-pyramidal dense canopy; native to SE USA in mixed forests, swamp borders, and coastal dunes; once protected due to popularity as Christmas ornament; over 1000 cultivated types; valuable food source for birds, mammals.
52	Pawpaw	<i>Asimina triloba</i> (Annonaceae) <i>triloba = 3-lobed calyx</i>	Bark: thin, smooth, grey-tan w/warty bumps on mature trees Leaf: alternate, simple, entire, obovate, large 6-12", droop downward, young leaves often finely hairy; deciduous Flower: trioecious, 1-2" broad bell-shaped, maroon, 6 petals, malodorous, fairly inconspicuous, late spring after leaf-on Fruit: 3-6" oblong to cylindrical fleshy berry, green ripening to yellow then brown, fall; <i>edible (tastes like banana)</i>	Nature Trail near Trillium Garden Butterfly House	N8 H9	15-40 ft; low/moist wooded areas in E-central USA; handling fruits can cause skin irritation in some people; fall color - yellow
53	Common serviceberry Downy serviceberry	<i>Amelanchier arborea</i> (Rosaceae) <i>arborea = tree-like</i>	Young Bark: smooth dark grey Mature Bark: narrow & shallow ridge & furrow, grey Leaf bud: scaly, pointy, reddish Leaf: alternate, simple, serrated, 2-4.5" elliptic w/pointed tip & indented base; pinnately-veined, deciduous Flower: monoecious, showy, white, narrow strap-like 5 petals, drooping in terminal clusters, before leaf-out, slightly fragrant Fruit: .25-.5" round pome, held in clusters in summer, mature from green-red-black, <i>flesh is dry</i>	or Nature Trail along creek S of bridge Cole Pond, behind Smith Admin Bldg.	N8 I6	20-50 ft; upland rocky forests & bluffs in E USA; attracts birds; fall color - red-yellow-orange
54	Red buckeye Yellow buckeye	<i>Aesculus pavia</i> <i>Aesculus flava</i> (Sapindaceae) <i>(formerly Hippocastanaceae)</i>	*Bark: (red) light grey-brown, <i>smooth w/prominent lenticels</i> (yellow) flaky-scaly, tan-grey Leaf: opposite, palmately compound, (5)-7 narrowly elliptic leaflets w/attenuate tip, margins finely- & (red) <i>unevenly</i> (yellow) <i>evenly</i> serrated, shiny dark green above, paler & fuzzy underside; deciduous Flower: monoecious, showy, 1.25" tubular <i>red/yellow</i> flower w/4 inequally sized petals held on 4-7" vertical spike, spring Fruit: 1.5-2" round to pear-shaped capsule, thick leathery non-prickly husk with glossy brown ovoid seeds; seeds poisonous if ingested	Nature Trail, S of bridge just past Trillium Education Garden	N8	(red) 10-15 ft; (yellow) 50-90 ft (red) riparian forests in SE USA; (yellow) Cumberland Plateau - TN, NC (red) thicket forming; fall color - (red) yellow; (yellow) yellow-orange (red) hummingbird attractant; (yellow) one of the first trees to leaf out
55	Devil's walking stick Hecules club	<i>Aralia spinosa</i> (Araliaceae) <i>spinosa = bearing spines</i>	Bark: smooth, segmented, thorny, grey-tan, trunk is usually 6 inches or less with limited side branching Leaf: alternate, (bi-) or tri-pinnately compound 15-48" long, 9-15 leaflets per thorny rachis, 2-5" long, ovate, serrated; deciduous Flower: monoecious, inconspicuous, tiny, white, 5 petals in spherical panicles, summer Fruit: showy .25" juicy purple berry, fall; <i>edible</i>	Trillium Education Garden, S end	N8	10-20 ft; dry to moist woodlands in SE USA in wide range of soil types; thicket forming; attracts birds; fall color - pale yellow to dull purple brown

Kershner B., Mathews D., Nelson G., and Spellenberg R. 2008. National Wildlife Federation® Field Guide to Trees of North America. New York, NY: Stirling Publishing Co., Inc.

Kirkman L., Brown C., and Leopold D. 2007. Native Trees of the Southeast. Portland, OR: Timber Press, Inc.

Little E. 1980. National Audubon Society Field Guide to North American Trees, Eastern Region. New York, NY: Chanticleer Press, Inc.

Missouri Botanical Garden Staff. 2017. Missouri Botanical Garden Plant Finder. Retrieved from URL <http://www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx>

Ponder, H. and Montague, D. 1998. Ornamental Horticulture Plant Identification Manual. Auburn, AL: Speedy Printing, East University Dr., Auburn, AL.

http://www.forestry.alabama.gov/Pages/Management/Forms/Forest_Trees_Alabama.pdf

<http://dendro.cnre.vt.edu/dendrology/syllabus/factsheet.cfm?>

<https://www.mortonarb.org/trees-plants/tree-plant-descriptions/>