

Order	Common Name	Scientific Name	Characteristics	Location	Grid	Notes
11	Pecan	<i>Carya illinoensis</i> (Juglandaceae)	Bark: scaly-flaky Leaf: alternate, odd-pinnately compound, inequilateral 11-17 falcate (crescent shaped) leaflets, serrated w/black gland at the tip of each "tooth"; deciduous Flower: pointed valvate bud, inconspicuous Fruit: nut surrounded by a very thin oblong seamed husk, edible	E of Trading Post	K9	60-80 ft; tall, strait trunk, often buttressed base, usually vase shaped canopy; yellow fall color
12	Green Ash	<i>Fraxinus pennsylvanica</i> (Oleaceae)	Bark: grey, narrow, lumpy, interlacing (diamond pattern), ridge & furrow Leaf: opposite, odd-pinnately compound, (7)-9 glossy, elliptic leaflets w/pointed tip, entire (smooth) to mid point & sparsely serrated (toothy margins) from mid point to tip; rachis is zig-zagged; <i>axillary bud is on top of the leaf scar (can be seen)</i> , <i>leaf scar strait-across</i> ; deciduous Flower: inconspicuous, purplish, early spring Fruit: single winged, narrowly obovate samara (flat baseball bat shape), hangs in clusters up to 3 in long	SW of Demonstration Vegetable Garden; NE of back bathrooms	J10	60-80 ft; largest range of any ash: Nova Scotia to Alberta south to FL and TX; weak limbs (brittle), good yellow fall color; attracts birds; currently under scrutiny for signs of attack by the Emerald ash borer (1/8 in "D" shaped holes in trunk, sudden crown die-back, bark splits, and epicormic sprouting).
13	Black Walnut	<i>Juglans nigra</i> (Juglandaceae)	Bark: thick, black/dark ridge & furrow Twigs: pubescent (fuzzy), light colored chambered pith Leaf: odd- and even-pinnately compound, 15-19 (up to 23) subopposite, lanceolate, serrated leaflets, 3-lobed leaf scar; deciduous Buds: valvate, fuzzy Flower: inconspicuous, up to 3" green male catkin Fruit: nut in round, very hard un-seamed husk, held 2-3 per cluster	W of Trading Post	K9	60-90 ft; allelopathic: secretes juglandin, a substance that suppresses the growth of other species; good yellow fall color; wood very expensive, often used as a veneer
14	Black Cherry	<i>Prunus serotina</i> (Rosaceae)	Young Bark: smooth, grey & shiny w/prominent lenticels (horizontal stripes) Older Bark: very dark grey-black flaky-scaly, trunk often buttressed Leaf: alternate, simple, narrowly elliptic with pointed tip & base, serrated, red hairs along midvein, glands on petiole; deciduous Flower: 1/2" showy white cylindrical clusters on ends of twigs after leaf-out Fruit: drupe (cluster of hard berries) purple	S of Demonstration Vegetable Garden; N of Fort/sandcastle	K10	30-100 ft; leaves are poisonous (cyanic acid); wood used to make fine furniture; yellow fall color
15	Common Hackberry	<i>Celtis occidentalis</i> (Ulmaceae)	Young Bark: smooth & warty Older Bark: "layered" ridge & furrow; <i>often ridge & furrow to first branches, then smooth/warty above</i> Leaf: alternate, simple, ovate, singly serrated, inequilateral base, light green, 3 prominent veins; deciduous Flower: green, held in clusters after leaf-out, inconspicuous Fruit: 1/4" red-orange drupe	S of Demonstration Vegetable Garden; W of Garden of Hope	K10	40-50 ft; short, strait trunk, some branches appear twisted, bark looks like 'canyon' often gets insect galls, high pH indicator species

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16	Dogwood	<i>Cornus florida</i> (<i>Cornaceae</i>)	Bark: very small shallow "boxy" platelets Twig: green or reddish, white pith Leaf: opposite, simple, entire, broadly elliptic w/pointed tip, parallel veins curve toward leaf tip; deciduous Flower Buds: very round, scaly, held on up-turned twigs Flowers: tiny yellow/green tightly-packed cluster inside 4 large, notched, (white) or pink bracts (modified leaves); spring Fruit: 1/4" shiny red oblong drupe, held in clusters on stalks; fall	S of Demonstration Vegetable Garden; W of Garden of Hope	L10	15-40 ft; native to E USA, often has spreading/layered crown - less symmetrical in forest than in cultivation
17	Sugar Hackberry	<i>Celtis laevigata</i> (<i>Ulmaceae</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: green, held in clusters after leaf-out, inconspicuous Fruit: 1/4" orange, red, or purple drupe (depending on ripeness)	Fern Glade	L9	60-80 ft; short, straight trunk, often gets insect galls, native to SE USA forested stream banks and rocky slopes, high pH indicator species
18	White Ash	<i>Fraxinus americana</i> (<i>Oleaceae</i>)	Bark: grey, narrow, lumpy, interlacing (diamond pattern), ridge & furrow Leaf: opposite, odd-pinnately compound, (7)-9 glossy, elliptic leaflets w/pointed tip, entire (smooth) to mid point & sparsely serrated (toothy margins) from mid point to tip; rachis is zig-zagged; <i>axillary bud is covered by petiole (can't be seen without removing leaf)</i> , leaf scar horseshoe shaped; deciduous Flower: inconspicuous, purplish, early spring Fruit: single winged, narrowly obovate samara (flat baseball bat shape, <i>but wider than Green Ash</i>), hangs in clusters up to 3 in long	mid-Nature trail, across from Inga Paul garden (in trail)	M8	70-100 ft; E USA; weak limbs (brittle), good yellow fall color; attracts birds; wood favored to make baseball bats; currently under scrutiny for signs of attack by the Emerald ash borer (1/8 in "D" shaped holes in trunk, sudden crown die-back, bark splits, and epicormic sprouting).
19	Blue Ash	<i>Fraxinus quadrangulata</i> (<i>Oleaceae</i>)	Bark: grey, narrow, lumpy, interlacing (diamond pattern), ridge & furrow Leaf: opposite, odd-pinnately compound, (5)-11 glossy, narrowly elliptic leaflets w/pointed tip, entire (smooth) to mid point & sparsely serrated (toothy margins) from mid point to tip; <i>axillary bud is on top of the leaf scar (can be seen)</i> , leaf scar crescent-shaped; deciduous Flower: inconspicuous, purplish, early spring Twigs: noticeably square Fruit: single winged, narrowly obovate samara (<i>wider than Green Ash, notched at the tip</i>), hangs in clusters up to 3 in long	S end Nature Trail, by creek	N8	60-70 ft; native range: Illinois to Great Smoky Mountains then dips down into N. AL
20	Winged Elm	<i>Ulmus alata</i> (<i>Ulmaceae</i>)	Bark: grey-brown, shallow ridge & furrow irregular corky layers (smoother than <i>U. rubra</i>) Leaf: alternate, simple, doubly serrated, inequilateral base; deciduous Twigs: grey-brown, hairless, often have corky wings Buds: pointy, redish, before leaf-out Flower: inconspicuous Fruit: single round papery samara, held in clusters each 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)