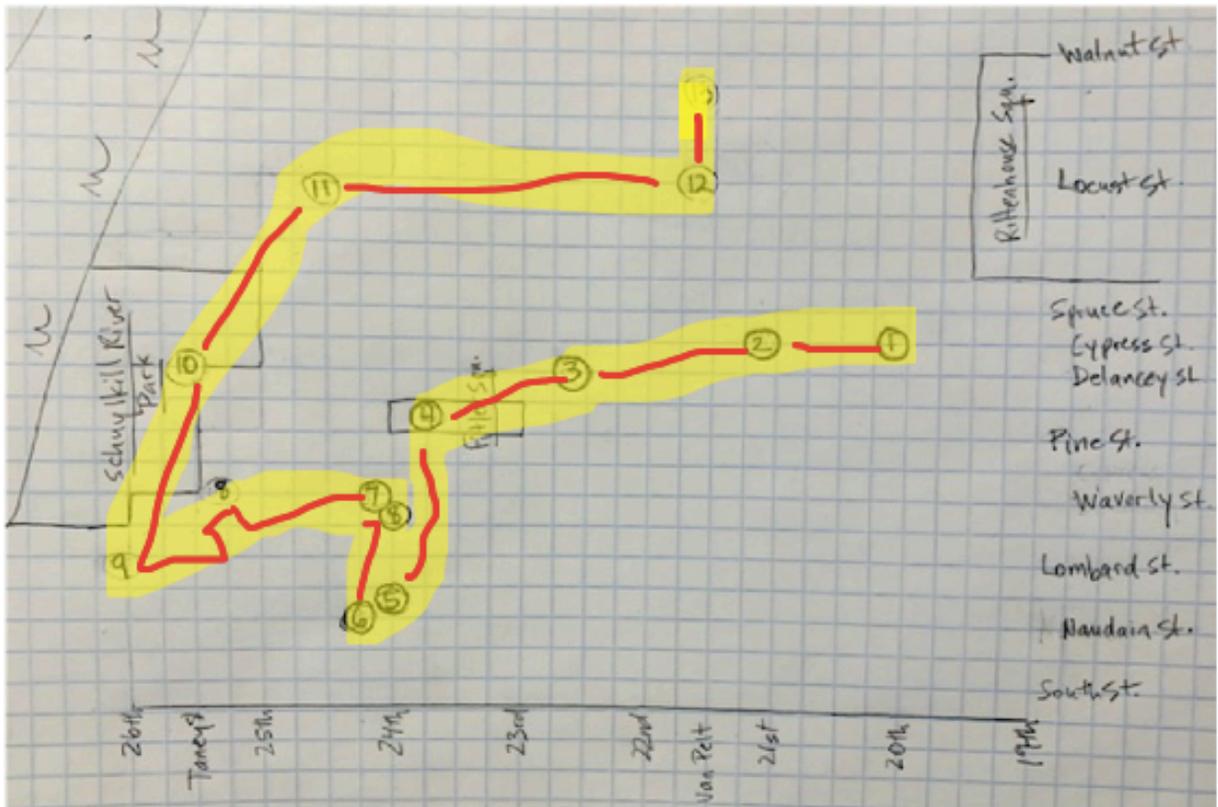


# A walking tour of notable trees in Center City West

“Those who dwell, as scientists or laymen, among the beauties and mysteries of the earth are never alone or weary of life.” – Rachel Carson



Susan Kahn  
Friends of Schuylkill River Park  
PHS Tree Tenders

## References:

The Urban Tree Book, An Uncommon Field Guide for City and Town, Arthur Plotnik in consultation with The Morton Arboretum, illustrations by Mary Phelan, Three Rivers Press, New York, NY (2000).

Philadelphia Trees, a field guide to the city and the surrounding Delaware Valley, Paul W. Meyer, Catriona Bull Briger and Edward Sibley Barnard, Columbia University Press, New York, NY (2017).

Ecology of Center City Philadelphia, Kenneth D. Frank, Fidler Square Press, Philadelphia, Pennsylvania (2015).

## 1. London Plane (*Platanus × hispanica*)

2003 Cypress (2004 Spruce rear), 2000 and 2100 block of Cypress (don't miss 2115 Cypress St.)

About these specimens: The specimens on these two blocks of Cypress Street demonstrate the adage, "Right tree, right place." This is what happens when park-size trees are planted on a narrow street. These graceful giants must be well-loved indeed to be permitted to thrive in these unlikely places. (In contrast, for a beautiful example of a well-sited London plane, wander over to the area across from 1926 Waverly Street.)

Leaf type: Large leaves, 4 – 9" long and wide; resembling maple leaves. Leaf lobes number 3 to 5. The hollow base of the leafstalk fits like a candle snuffer over a pointy-headed bud.

Bark: Outer bark peels away to create mottled shades of tan, white, gray and green. Upper branches are smooth and white or brightly dappled

Fruit: dangling from long stems are two 1" thick, ball-shaped seed nutlets nicknamed "buttonballs"

Average mature size in city: 40 - 80' tall, 1 -3' thick

Origin: crossbred in 17<sup>th</sup> century England between the American sycamore and the Oriental Planetree of southern Europe and Asia. Once mistakenly called an Oriental Plane.

Other notable features: The world's most reliable and most common city tree. How to distinguish a Sycamore from a London Plane: London Plane's buttonballs hang in pairs while Sycamores sport single balls. In the early 20th century Philadelphia leaders, seeking to raise the city's stature, imitated the ubiquity of planes in Paris and London and made London Planes the most common trees planted in Philadelphia.



## 2. American Elm (*Ulmus americana*)

2107 Cypress (2108 Spruce – rear yard)

About this specimen: This towering tree is unusual not only for its size but also for the fact that it is an elm that has survived the onslaught of the Dutch Elm fungus. Survivors such as this one are used by botanists to develop tougher crossbred strains.

Leaf type: 4 - 6" shaped like a spear tip, lopsided at base and edged with double teeth.

Bark: Heavy, rough bark; tall, straight trunk and wide fountain of branches forming a vase or wineglass shape.

Flowers: small reddish flower in spring

Fruit: seeds enclosed in a *samsara*, a coin-sized papery oval carried by the wind

Average mature size in city: 40 – 80' tall and wide, 3 - 4' thick

Origin: native

Other notable features: A celebrated urban classic that has been battered by disease beginning in the 1930's with the introduction of Dutch Elm disease. The state tree of both North Dakota and Massachusetts. In Celtic mythology elm trees were associated with the Underworld. They had a special affinity with elves who were said to guard the burial mounds, their dead and the associated passage into the Underworld.



### 3. Ginkgo (*Ginkgo biloba*)

2200 block of Delancey St.

About these specimens: Ginkgo trees that line both sides of this block of Delancey Street afford an opportunity to appreciate this city favorite. Many appear to be the same age, but some are growing much more vigorously than others. The relative size of their pits is a good clue. The healthiest of these ginkgoes enjoy larger pits and, therefore, more air, water and soil nutrients.

Leaf and flower: fan-shaped, about 3" across, yellow in fall; leaf extract is said to improve memory. The male tassel-like catkins and stubby female flowers are found on separate trees

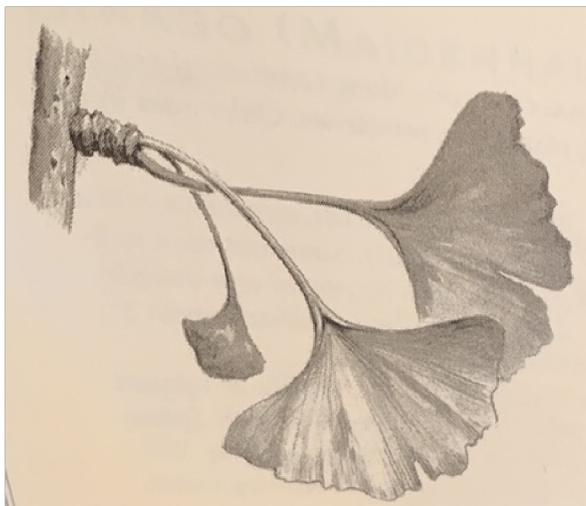
Bark and branching: sparse branches are straight and sparse at an upward angle; leaves grow from stubby pegs

Fruit: ginkgoes are either male or female. Only females produce crabapple-sized, apricot-colored rancid smelling fruit.

Average mature size in city: 40'–80' tall

Origin: one of the earth's oldest plant species; in the dinosaur era it grew across all temperate regions; westerners found ginkgoes in China in the 17<sup>th</sup> century and exported them to Europe; In 1784 William Hamilton planted the first one in America in Philadelphia in his Woodland estate in West Philadelphia.

Other notable features: Ginkgoes are hardy city trees able to survive pests, drought, salt, city soils and some pollution. Only males currently are planted in cities because of the female "fruit problem"; the females in center city are all older trees that pre-dated the females' exclusion from polite society. A favorite of Frank Lloyd Wright.



#### 4. Northern Red Oak (*quercus rubra*)

Near center fountain in Fidler Square, 2300 block of Pine St.

About this specimen: Because Fidler Square is over a century old, it is very possible that this mature beauty was among its first plantings. Note that the tree is out of alignment with the square's symmetrical layout. For this reason, the tree was in danger of removal during renovations to the square several years ago before its admirers came to the rescue. Their activism is an inspiration. As is often said and not so often followed, "One man can make a difference and every man should try."

Leaf type: alternating leaves that are 4 – 8" long and have 7 to 11, spine-tipped lobes

Bark: bark of older trees develops wide, flat ridges and shallow furrows. The furrows form a pattern resembling ski trails higher up on the trunk.

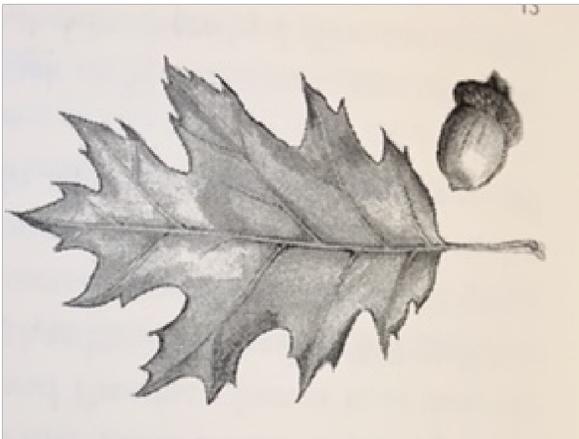
Flowers: produces pale yellow-green catkins that appear at about the same time as new foliage in April-May

Fruit: produces acorns that are round and 3/4" to 1" long with a flat, saucer-like cap that take two years to mature

Average mature size in city: 60-75' tall and 45' spread

Origin: native to the northeast United States and Canada, not frequently south of Pennsylvania

Other notable features: Priests of Zeus would listen to the rustling leaves of the sacred oak trees and interpret their meanings as the words of the gods. State tree of New Jersey.



## 5. Sweetgum (*liquidambar styraciflua*)

507 -509 S. 24<sup>th</sup> St.

About these specimens: Although a beloved tree for its fall color and unique seed balls, sweetgums do not appear on Philadelphia's list of approved street trees. Nevertheless, mature sweetgums with a circumference over 24" such as these are protected as heritage trees. (These are two more examples of street trees that long ago outgrew their too-small pits.)

Leaf type: Star-shaped leaves, usually 5 lobes, but often 7, about 4 – 7" across, bright green in summer with a range of stunning fall colors. When crushed, the leaves emit a camphoric fragrance.

Bark: medium gray and roughly furrowed

Fruit: distinctive woody, spiny fruit (gumballs) 1 -1 ½" wide.

Average mature size in city: 35- 60' tall, 20'40' wide

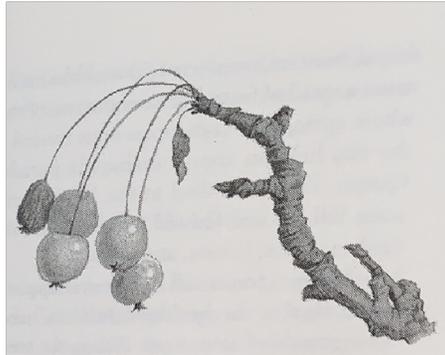
Origin: native to eastern North America

Other notable features: The resin of sweetgum trees is used for the manufacture of syrups and ointments. Has long served as a folk treatment for skin irritations and wounds. Because the gumballs drop simultaneously posing an ankle-twisting hazard to pedestrians, many municipalities outlaw sweetgums.



## 6. Crab apples (*malus* hybrid)

2404 Naudain St.



About these specimens: It is worth noting the creative, naturalistic tree pits that mirror the trees' asymmetry.

Leaf type: Alternate leaves on twigs, 2 -4" long. Often spoon-shaped with pointed tip and finely toothed edges

Bark: short truck, often divided. Flaky gray-brown bark.

Flowers and fruit: Mostly white flowers emerge in abundant clusters from deep pink or red buds. Individual flowers have five petals, five pistils and many stamens. Small crown of sepal remnants on end of fruit opposite stem. Red fruit remains on tree into early winter.

Average mature size in city: 15 – 30' tall, 20 - 30' wide

Origin: There are 800 types of crabapples but only four native American species.

Other notable features: A symbol of fertility and a forager's delight. Crab apple trees are associated with love and marriage and its small, hard fruits make a delicious jelly.



## 7. Bald Cypress (*Taxodium distichum*)

2402 Waverly St.

About this specimen: It is pure serendipity that this bald cypress is flanked by dawn redwoods at 414 S. 24<sup>th</sup> St. and 2507 Waverly. Because these two species are often confused, this presents a wonderful opportunity to learn the differences between the two.

Leaf type: needle-shaped leaves about ½" long, soft and flexible, form feather pattern along two crowded rows. Green in summer turning to copper-colored in the fall.

Bark: smooth gray-brown (young) to fibrous, peeling reddish brown

Flowers: Male flowers have clusters of long, beady tassels that dance in the wind in late winter

Fruit: 1/10" female conelets become 1" brown woody cones resembling miniature soccer balls

Origin: native of American swamps and wetlands

Average mature size in city: 50 – 80' tall, 20-30' wide, 2-3' thick

Other notable features: Like Dawn Redwoods, Bald Cypresses indeed go bald in winter as they are two of the few conifers to drop all leaves and twigs each year. Unlike Dawn Redwoods, though, a Bald Cypress in the wild will produce "knees," underwater roots that break through the ground a few feet from the trunk. State tree of Louisiana.

In 1931, the fossilized stump of a bald cypress over 36,000 years old was unearthed 12 meters underground at 8<sup>th</sup> and Locust during excavations for a subway tunnel. Scientists hypothesized that the tree grew in a warm interglacial period and that meltwater from glacial ice flowing down the Delaware River inundated the swamp, burying it in sediment. Pieces of the fossil are on display at the Wagner Free Institute of Science of Philadelphia in North Philadelphia.



The tree is one of the oldest symbols of mourning. Ancient Greeks and Romans referred to the cypress as the "mournful tree" for this reason. Adherents of Christianity and Islam historically planted cypress near burial sites and cemeteries for protection.

## 8. Dawn Redwood (*Metasequoia glyptostroboides*)

414 S. 24<sup>th</sup> St. and 2507 Waverly St.

About these specimens: A unique opportunity to compare dawn redwoods and a bald cypress within two blocks. It is helpful that the first dawn redwood on 24<sup>th</sup> Street bears a plaque noting that it was planted 25 years ago. Compare its size to the one at 2507 Waverly which appears to be at least decade older.

Leaf type: Like the bald cypress, it is a deciduous conifer, having feathery, needlelike foliage which drops off in winter. However, the side shoots are opposite on a dawn redwood while alternate on a bald cypress.

Bark and branching: Similar to bald cypress except trunk base sometimes becomes braided and fluted when mature. Also, note how the redwoods' branches angle upward while the branches of the bald cypress are more horizontal.

Fruit: elongated or rounded cones, ½ to 1" long, blue when young

Average mature size in city: 90' tall

Origin: known only from fossils before 1943, it grows naturally only in central China

Other notable features: In mature specimens, depressions or "armpits" appear beneath some branches. (Bald cypresses lack these depressions.)



## 9. Blue Atlas Cedar (*Cedrus atlantica* 'glauca')

rear yard 432 S. 26<sup>th</sup> St., view from Lombard St.

About this specimen: view this tree where it shades the sidewalk along Lombard Street.

Leaf arrangement: sharp silvery blue evergreen needles sprout in bunches from spurs.

Branches: One clue to discerning the difference between a Deodar (a “true” cedar) and an Atlas cedar: Deodar’s branches droop heavily while Atlas’ rise slightly (D for *descending*/Deodar and A for *ascending*/Atlas). An even easier way – if the tree is growing in the center of cold city such as this one is, it’s an Atlas. Deodars grow exclusively in warm climates.

Bark: dark gray furrowed bark, smoother on younger branches. Note the horizontal holes drilled in the bark by sapsuckers, a variety of woodpecker.

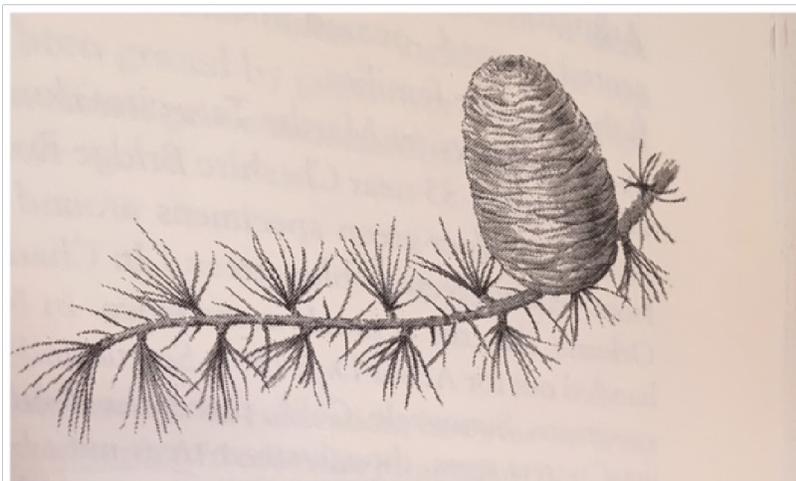
Flowers: inconspicuous flowers in spring; release yellow pollen in the fall.

Fruit: resin-oozing 2 – 3” cones grow only on upper branches and rise straight up

Average mature size in city: 40-70’ tall, 30-50’ wide, 2-3’ thick

Origin: native to North Africa’s Atlas Mountains

Other notable features: The ancient Egyptians used oil extracted from Blue Atlas cedar wood for embalming, cosmetics, perfumery, incense and medicinal purposes. The aroma serves to naturally ward off insects, making the wood a popular choice for modern furniture builders.



## 10. American Linden (*Tilia Americana*)

2500 block of Delancey St., Schuylkill River Park

About these specimens: While in dire need of pruning, Schuylkill River Park's most notable trees are these six lindens located on the park's south side bordering Delancey Street.

Leaf arrangement: alternate

Leaf type – a lopsided heart with sharp even teeth at edges and pointed tip, up to 10" long

Bark: Gray to brown, sometimes with silvery highlights, when mature breaking into long, narrow flat-topped scaly ridges

Flowers: fragrant, pale-yellow dangling clusters on hockey-stick shaped bracts.

Fruit: bracts bear a group of ¼" nutlets. The entire structure falls in winter and the bract carries the nutlets like a wing on the breeze.

Average mature size in city: 30-60' tall

Origin: native to northeast of the United States and Canada

Other notable features: The fragrant flowers are preferred by honeybees. For this reason, the tree is sometimes called bee-tree.



## 11. Honey Locusts (*Gleditsia triacanthos*)

201 S. 25<sup>th</sup> Street

About these specimens: It is tough to pass up an opportunity to highlight a stand of Locust trees on Locust Street. These specimens cast dappled shade on the west and south sides of the apartment building, Locust on the Park. Also note how the ten locust trees on the south side of Locust Street side join limbs with those on the north side of the street to form a lovely cathedral arch.

Leaf type: 6 -8" long compound, with 20 to 30 leaflets.

Bark: smooth and shiny reddish-brown, developing into grayish-brown and splitting into large, thick plates with age

Flowers: shaped like pea flowers, greenish yellow to white, in drooping 2" clusters

Fruit: some varieties have thick, twisting, 7 – 18" long bean-like pods that may last into the winter; inside are hard, shiny brown seeds

Average mature size in city: 35 – 70' tall

Origin: eastern and central United States

Other notable features: Inside the pods are hard seeds the size of navy beans surrounded by a sweet pulp. The "honey" in its name refers to this pulp. John the Baptist reportedly sustained himself in the wilderness with pods of the carob or locust tree so when English colonists encountered these trees, they termed them honey locusts. The thorns on honey locust trees have many uses. Confederate soldiers used them to pin together their tattered uniforms – hence their nickname, Confederate "pintree."



## 12. Willow Oak (*Quercus phellos*)

2114-18 Locust St.

About these specimens: These three willow oaks are lovely examples of this beloved street tree. The generously long shared tree pit is worth noting. The open pavers in between trees not only allows water and air to reach the roots but allows the roots of the trees to intertwine and support each other. Trees planted in this way are much more stable and able to withstand wind gusts.

Leaf type: finger shaped with wavy margins that turn shades of bronze and red in the fall

Bark: gray-brown, becoming rough with shallow furrows and ridges and thick scales

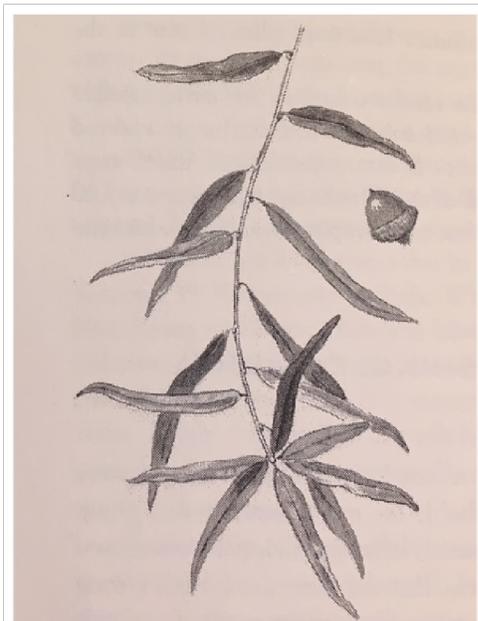
Flowers: inconspicuous catkins

Fruit: very small acorns, usually ½" long and wide, taking two years to mature

Origin: native to southern United States from New York to Florida and Texas

Average mature size in city: 60' tall

Other notable features: has a straight stem with much smaller side branches; lower branches aim downward. Known as a favorite of Thomas Jefferson.



### 13. Southern magnolia (*Magnolia grandiflora*)

222 S. Van Pelt St.

About this specimen: Another example of a beautiful giant whose admirers have allowed it to grow beyond its comfort zone. Is presently thriving despite the dangers posed by its cemented pit.

Leaf type: leaves appear before flowers, 5 -10" long with waxy shine, evergreen leaves may yellow before giving way to new leaves the next year

Bark: smooth gray, later cracking into scaly plates

Flowers: large, creamy lotus-like flowers, blossoms 8 – 10' across, lemony fragrance

Fruit: red, hairy, cone-like consisting of many compartments, in winter two plump fire-red seeds extrude from each follicle and dangle from white threads

Origin: native to the American South

Average mature size in city: 50-80' tall

Other notable features: integral to southern culture, Mississippi honors the tree as a state emblem. Because these flowers represent durability, strength of character, and bearing, they are widely used in weddings.

