

# A Self-Guided Walking Tour of Notable Trees in Fonthill Arboretum and Bird Sanctuary

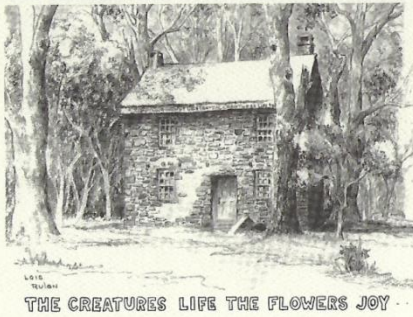
Presented Spring 2018 by  
The Doylestown Nature Club

[www.doylestownnatureclub.com](http://www.doylestownnatureclub.com)



**Fonthill Arboretum and Bird Sanctuary** is the 66-acre estate of Henry Chapman Mercer, founder of the Mercer Museum and Moravian Tile Works. Dr. Mercer dedicated Fonthill as a Bird Sanctuary in 1912. In 1928, he initiated the Arboretum with help from the Doylestown Nature Club (DNC).

WHO LEARNS WILL LOVE AND NOT DESTROY



**The Little House in the Woods** was rebuilt by Mercer in 1916 for use by the DNC.

**The Logo:** The stylized bird was designed by Dr. Mercer

and adapted by him for the arch-topped niche above the Little House. *Silva vocat* is Latin for “the forest calls”.

This tour begins in front of the castle, proceeds in front of the pavilion, and goes around back of both buildings. The tour then continues on the lawn to the left front of the castle. The numbers 1-28 in the list of trees correspond to the numbers on the maps provided. Where historical information is available for a tree, its map number is outlined in black; the number in parentheses corresponds to archived information maintained by Henry Mercer and, most likely, by Laura and Frank Swain.

Start at Tree #1 and have fun touring some of the Arboretum's most notable trees.

## Castle/Pavilion

### 1 **Black Cherry** *Prunus serotina*

On April 30, 1916, Henry Mercer's beloved dog Rollo died under the cherry tree which stood in the triangle between the loop (towards the pavilion) of the main front driveway and the road to the pottery. In 2012 the DNC planted a replacement Black Cherry tree. The flowers give rise to edible reddish-black berries. It is a host for caterpillars of various Lepidoptera and the eastern tent caterpillar defoliates entire groves some springs. The foliage, particularly when wilted, contains cyanogenic glycosides, which convert to hydrogen cyanide if eaten by animals. It is recommended that farmers remove any trees that fall in a field containing livestock, because the wilted leaves could poison the animals.

### 2 **Cucumber Magnolia** *Magnolia acuminata* (193)

It was presented by Geoffrey Bullard (who had raised it from a cutting) to Frank Swain and planted Sept. 11, 1953. Perfect, slightly fragrant greenish-yellow flowers bloom high upon the tree in May to early June with pinkish red fruit resembling a cucumber. It is one of the largest magnolias and one of the cold-hardest.

### 3 **Chinese Chestnut** *Castanea mollissima*

A species of Chestnut native to East Asia which is resistant to the fungal disease chestnut blight. The nuts are edible and provide a significant food source for wildlife.

### 4 **London Planetree** *Platanus x acerifolia*

The London Planetrees that line the front drive from East Court Street were planted during Mercer's lifetime and form an allee. An allee is a formal walk or drive in a garden or park bordered by trees. The London Planetree is a hybrid resulting from a cross between the native Sycamore and the non-native Asian Planetree.

Like the Sycamore, this is a large tree with beautiful peeling bark. It is a deciduous broadleaf with spreading large green leaves that have no effective fall color. The ornamental bark flakes off, exposing white, smooth bark underneath.

**5 Kentucky Yellowwood** *Cladrastis kentukea*

Yellowwood is thought to be our best medium-sized, native flowering tree. Its white, fragrant, pea-like flowers hang in 15-inch-long clusters in spring, and, in some years, the tree offers attractive yellow fall foliage. Yellowwood also has a beautiful framework of branches that provides winter interest, but the tree's multiple trunk habit makes it prone to limb breakage at the crotch. It must be pruned in summer to ensure good branch angles.

**6 Ash** *Fraxinus sp.*

Ash trees have opposite leaf arrangement. This tree will be identified further when it leafs out. Fifteen Ash trees on Fonthill are being injected with a chemical which prevents emerald ash borer infection. Certified arborists Matt Benzie from Indigenous Ingenuities and Dennis Quinn from Quinn Care have been performing the injections. The emerald ash borer is a half-inch long metallic green beetle with the scientific name *Agilus planipennis Fairmaire*. Larvae of this beetle feed under the bark of Ash trees. Their feeding eventually girdles and kills branches and entire trees. Emerald ash borer was first identified in North America in southeastern Michigan in 2002 and in Bucks county the summer of 2013. Emerald ash borer feeds exclusively on Ash trees in North America. Host species include Green Ash, White Ash, Black Ash, Blue Ash, and Pumpkin Ash. Tens of millions of Ash trees have been lost to this pest, which usually kills Ash trees within 3-4 years of infestation. Symptoms of emerald ash borer infestation include upper crown dieback, epicormic branching, bark splits and bark flaking, or tissue damage resulting from woodpecker predation.

**7 White Pine, Eastern White Pine** *Pinus strobus (146)*

This tree was presented by Laura and Frank Swain in 1938. In 1926 Mercer purchased 1000 white pines from John W. Keller, Chief of the Bureau of Forest Extension for the Commonwealth of Pennsylvania. Mercer had applied for the trees through the Department of Forests and Waters. The White Pines were

planted with the assistance of the Boy Scouts. The seedlings were placed 6 feet apart.

The Eastern White Pine is the tallest tree in eastern North America and mature trees are often 200 to 400 years old. It provides food and shelter for numerous forest birds, such as the red crossbill, and small mammals such as squirrels. Eastern White Pine forests originally covered much of north-central and north-eastern North America. The leaves ("needles") are in fascicles (bundles) of 5, or rarely 3 or 4, with a deciduous sheath. They are flexible, bluish-green, finely serrated, 5–13 cm (2–5 in) long, and persist for 18 months, i.e., from the spring of one season until autumn of the next, when they abscise. The cones are slender, 8–16 cm (3 ¼–6 ¼ in) long and the seeds are dispersed by wind. Cone production peaks every 3 to 5 years. Because the Eastern White Pine is somewhat resistant to fire, mature survivors are able to re-seed burned areas. In pure stands mature trees usually have no branches on the lower half of the trunk. The white pine weevil and white pine blister rust, an introduced fungus, can damage or kill these trees.

#### **8 American Holly** *Ilex opaca*

American Holly is a native medium-sized evergreen tree that gets small white flowers in May-June. Bright red berries ripen on female plants and persist through the winter. Holly sprigs are widely known as the everlasting symbol of Christmas cheer. But holly as a tree offers much more. It lends unique beauty to the landscape all year long, provides cover and food for birds. American Holly has captivated plant lovers since the days of the Pilgrims.

#### **9 Persimmon** *Diospyros virginia* (153)

These two trees, planted in approximately 1938, were “raised from seed by Laura L. Swain from seed taken from her brother’s place at Gardenville.” Persimmon is a native tree in this area. The ripe fruit is sweet and soft. The tree can be identified by its thick, dark gray bark that is broken into rectangular blocks.

#### **10 American Sweetgum** *Liquidambar styraciflua* (63)

Mrs. Irvin Megargee James (Elizabeth James), founding president of the DNC, donated and planted a Sweetgum on May 11, 1929.

The American Sweetgum has star-shaped leaves, neatly compact crown, interesting fruit and twigs with unique corky growths called wings. It is an attractive shade tree. It has become a prized specimen in parks, campuses and large yards across the country. The fall color is spectacular. The glossy green leaves turn beautiful shades of yellow, orange, red and purple in the autumn.

**11 American Sweetgum** *Liquidambar styraciflua*

See #10 for botanical information

**12 Kentucky Coffee Tree** *Gymnocladus dioica* (111)

In 1933, Laura L. Swain planted some seeds that were obtained from the Wilson Long Farm in Gardensville, where a very large old tree was standing. The seedling trees were then planted in these locations at Fonthill in 1934. This tree is native to the Midwest. It is a tall deciduous tree with compound leaves containing 3-7 pairs of leaflets. White flowers appear in late spring. Flowers in female trees produce long, flat brown pods in the fall that persist through winter. The seed may be roasted and used as a substitute for coffee beans; however, unroasted pods and seeds are toxic. The wood from the tree is used by cabinetmakers and carpenters.

**13 American Holly** *Ilex opaca* (80)

The Holly was donated by the DNC and planted on November 2, 1929. See #8 for botanical information.

**14 Northern Catalpa** *Catalpa speciosa* (62)

Mrs. Irvin M. James, founding president of the DNC, donated this tree; it was planted on May 11, 1929. It is a deciduous tree and can be recognized by the large, heart-shaped to three-lobed leaves and showy white or yellow flowers in broad panicles. In the autumn they bear long fruits that resemble a slender bean pod full of small flat seeds, each with two thin wings to aid in wind dispersal. Due to their large leaf size, Catalpas are a popular habitat for many birds, providing them good shelter from rain and wind. These trees drop dark-brown bean pods during late summer. The tree is the sole source of food for the catalpa sphinx moth (*Ceratomia catalpae*), the leaves being eaten by the caterpillars.

**15 Tuliptree or Tulip-Poplar** *Liriodendron tulipifera*

The Tuliptree, often referred to as a White or Yellow-Poplar, is actually a type of magnolia. It is named for its cup-shaped, tulip-like flowers that bloom in spring. The tall tree with four-lobed bright green leaves and pale green or yellow blossoms is the state tree of Kentucky, Indiana and Tennessee.

**16 Honeylocust** *Gleditsia triacanthos*

Honeylocust can reach a height of 66–98 ft with fast growth. Honeylocust leaf out relatively late in spring and they turn yellow in autumn. The strongly scented cream-colored flowers appear in late spring, in clusters emerging from the base of the leaf axils. The fruit of the Honeylocust is a flat legume (pod) that matures in early autumn. The pulp on the insides of the pods is edible, unlike the black locust, which is toxic.

**17 Northern Catalpa** *Catalpa speciosa*

See #14 for botanical information.

## Front Lawn

**18 American Holly** *Ilex opaca* (160)

A female holly was donated and planted on the front lawn by Frank K. Swain on November 18, 1939. See #8 for botanical information.

**19 European Larch** *Larix decidua*

The European Larch is a deciduous conifer. It has soft green needles that turn yellow in the fall before dropping, and reddish brown cones that persist through winter. An American Larch (74) was donated by David Burpee (son of the founder of Burpee Seeds) and brought to Fonhill by Mrs. Irvin James of the DNC on Halloween of 1929. It was planted along the waterway near the tiled bridge. It is a deciduous conifer whose green needles turn a showy yellow in fall before falling to the ground as winter approaches. This is a tree of very cold climates, growing to the tree line across North America. It is native to boggy soils, wet poorly-drained woodlands. This tree will be verified further when it leafs out.

## **20 Flowering Dogwood** *Cornus florida*

This beautiful native tree is interesting all year, with pink or white flowers in late winter or early spring, followed by attractive green foliage. In late summer, the leaves turn dark red, and bright red berries appear in place of the flowers. The berries are an important food for several types of wildlife, including many species of songbirds. In the winter, the tree has an attractive silhouette with small buds.

## **21 Sourwood, Lily-of-the-Valley Tree** *Oxydendrum arboreum*

This tree was planted in 2009 in memory of DNC member Dora M. Fink. A medium-sized native tree, the Sourwood shines in the summer and fall. Its midsummer flowers appear like lilies-of-the-valley, are highly fragrant and contrast nicely against the green foliage. Then in the fall, leaves turn intensely beautiful shades of brilliant crimson, purplish-red and sometimes yellow. Honey produced from the flowers of this tree is considered by many to be unmatched by clover, orange blossom, fireweed or any other honey.

## **22 Paulownia, Empress Tree or Princess Tree** *Paulownia tomentosa*

In spring, this medium-sized tree is covered in clusters of funnel-shaped flowers. The flowers give way to oval, woody seed capsules which ripen to brown in the fall and then split open to release a large number of winged seeds. Many capsules persist on the tree through winter. Pale yellow-brown buds for next year's flowers form in panicles in the summer and persist through winter. The original tree was a gift from Dr. Mercer's aunt, Miss Chapman. The parent tree in Doylestown was at "Aldie" and the original tree at Fonhill was grown from a cutting and planted near the Terrace Pavilion.

The trees are present in much of Southeast Asia; they have become invasive in the US. The genus was named in honor of Anna Paulowna, queen consort of The Netherlands (1795–1865), daughter of Tsar Paul I of Russia. It was once customary in Japan to plant a Paulownia when a baby girl was born, and then to make it into a dresser as a wedding present when she married.

Once the trees are harvested, they regenerate from their existing root systems.

**23 Maple** *Acer sp.*

Maple trees have opposite leaf arrangement. This tree will be identified further when it flowers or leaves out.

**24 Red Maple** *Acer rubrum* (**Swamp, Water or Soft Maple**)

It is one of the most common and widespread deciduous trees of eastern and central North America. Its flowers, petioles, twigs and seeds are all red to varying degrees. Among these features, however, it is best known for its brilliant deep scarlet foliage in autumn. It can be found growing in swamps, on poor dry soils, and most anywhere in between. The Red Maple can be considered weedy or invasive. It is taking over forests in the eastern US, replacing traditional mainstays like Oaks, as well as Hickories and Pines.

**25 Pin Oak or Swamp Oak or Spanish Oak** *Quercus palustris*

In June 1929, a brick monument designed by Henry Mercer was erected at the South Court Street corner of Fonthill grounds in line with a row of Elm trees planted in memory of deceased members of the DNC along Court St. The Monument was dedicated to the deceased members of the DNC. The Elm trees succumbed to Dutch Elm Disease (DED). DED is caused by microfungi and spread by beetles. DED originated in Asia and was accidentally introduced into the USA where it devastated native populations of Elm. The Elm trees were replaced by Pin Oak trees which are large low-maintenance deciduous trees with small acorns. The winter-persistent leaves and the pin-like stubs (which remain after the lower branches are lost as the tree matures) are the most distinctive characteristics of the tree. Oak trees support the most wildlife of any tree. Robins, blue jays and starlings are among many of the types of birds that nest high in the canopies of Oak trees. Many creatures make meals of acorns and Oak leaves. Bears, deer, and about two dozen species of birds eat acorns. Scrub jay, magpies, wood ducks, wild turkeys, mountain quail, flickers and woodpeckers all depend on Oaks for food. Insects also feed on leaves, twigs, acorns, bark and wood of Oak trees. Pin Oaks are susceptible to Bacterial Leaf Scorch (BLS) which currently has no cure.



**26 Sassafras, Mittenleaf** *Sassafras albidum*

A large Sassafras tree that has fallen is at the center of this grove of young sassafras trees. The young trees have formed as suckers from the spreading root laterals of the parent tree. Two old dogwood trees are at the edge of the grove. See #28 for botanical information.

**27 Northern Catalpa** *Catalpa speciosa* (151)

This Catalpa was raised from seed first planted in the Swain's flower beds. It was planted as a young seedling in 1938. See #14 for botanical information.

**28 Sassafras, Mittenleaf** *Sassafras albidum*

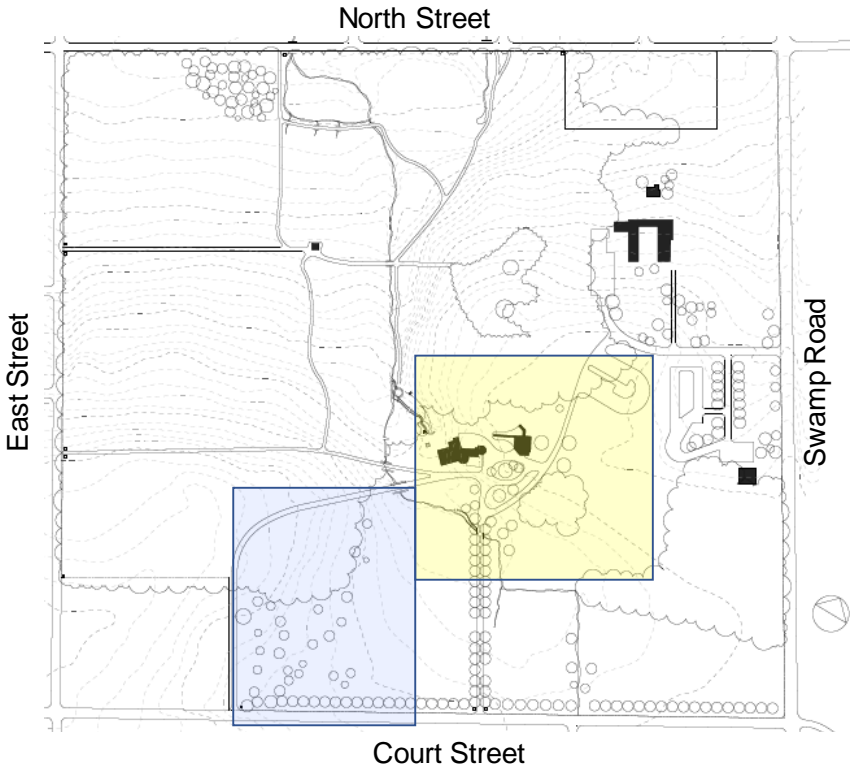
All parts of Sassafras plants, including roots, stems, twig leaves, bark, flowers, and fruit, have been used for culinary, medicinal, and aromatic purposes by humans. The leaves, bark, twigs, stems, and fruits are eaten by birds and mammals. Sassafras leaves and twigs are consumed by white-tailed deer and porcupines. Other Sassafras leaf browsers include groundhogs, marsh rabbits, and American black bears. Rabbits eat Sassafras bark in winter. Each tree can produce three different leaf shapes: mitten-shaped (one small, one large lobe), three-lobed, and unlobed oval.

References:

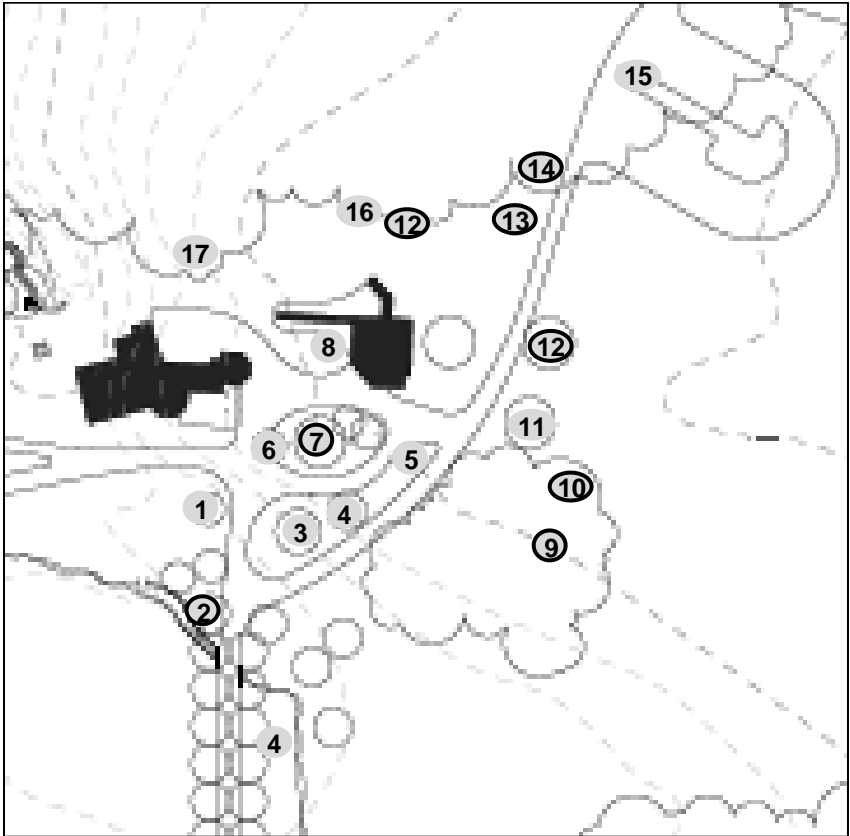
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## Acknowledgements

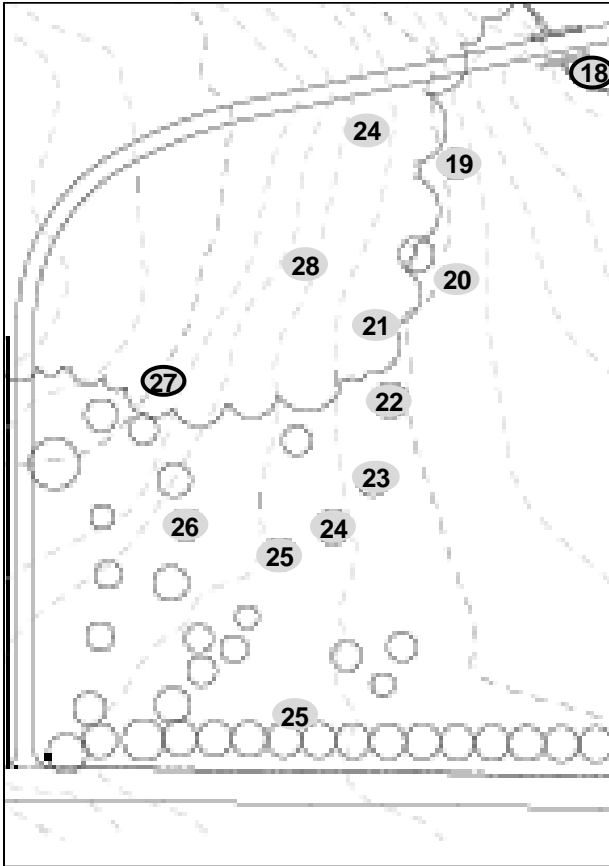
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Castle / Pavilion



# Front Lawn



Prepared by the Doylestown Nature Club, April 2018  
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