

## PARKSIA

Dedicated to the dissemination of useful information regarding plants

@ <http://herbarium.millersville.edu>

### **MILLERSVILLE UNIVERSITY'S TREES OF DISTINCTION IN 2015** [www.millersville.edu/trees](http://www.millersville.edu/trees)

#### **CHRISTOPHER R. HARDY**

*Department of Biology and the James C. Parks Herbarium, Millersville University of Pennsylvania, PO Box 1002, Millersville, Pennsylvania, 17551, United States of America*

Trees on the Millersville University campus are invaluable assets to the University in many ways. They provide subjects for educational and scientific study, they provide habitat and food for wildlife, they shade sidewalks and buildings and thereby moderate temperatures in summer, they act as sinks for the greenhouse gas CO<sub>2</sub>, they are objects of beauty in their own right, and they have stories to tell and link us with our past. In order to help nurture a campus-wide awareness of their value, the James C. Parks Herbarium and Botany Program of the Biology Department at Millersville released their website, *Millersville University's Trees of Distinction* in 2014 ([www.millersville.edu/trees](http://www.millersville.edu/trees); Fig 1). Since then, two trees had succumbed to natural causes, necessitating the designation of two new trees. Additionally, at the request of our President (Dr. Anderson) and under the direction of our Vice President for Enrollment Management (Brian Hazlett), the Herbarium worked with our Director of Web & Creative Services (John Lindsey) to create plaques with descriptions of the trees to mark the trees in the landscape (Fig 2). Additionally, photographer and Professor Emeritus Patrick Cooney (physics) created a photographic album for the trees (*Parksia* 3: 5-13 at <http://herbarium.millersville.edu/parksia/>) and

these same photographs were used to illustrate each tree at the Trees of Distinction website (Fig 3). Given these developments, this follow-up article in *Parksia* was needed to describe these changes and to serve as an updated, printable guide to the University's Trees of Distinction that users may print and take with them on a walking tour of the trees.

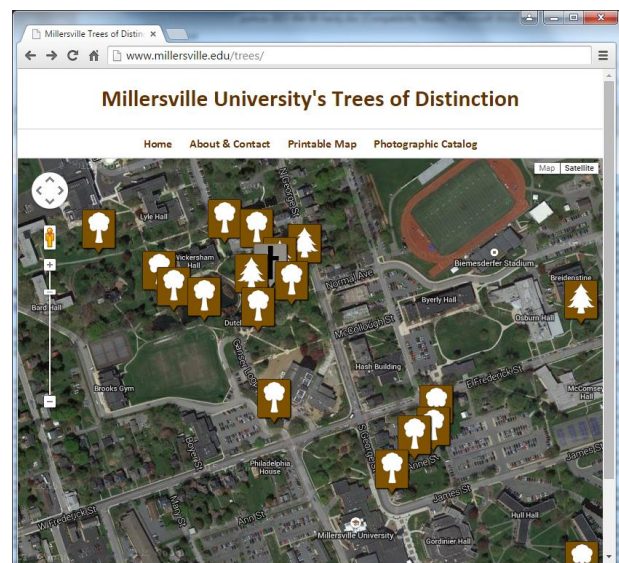


Fig 1. Screenshot from the homepage of Millersville University's Trees of Distinction, taken April 17, 2015 at [www.millersville.edu/trees/](http://www.millersville.edu/trees/).

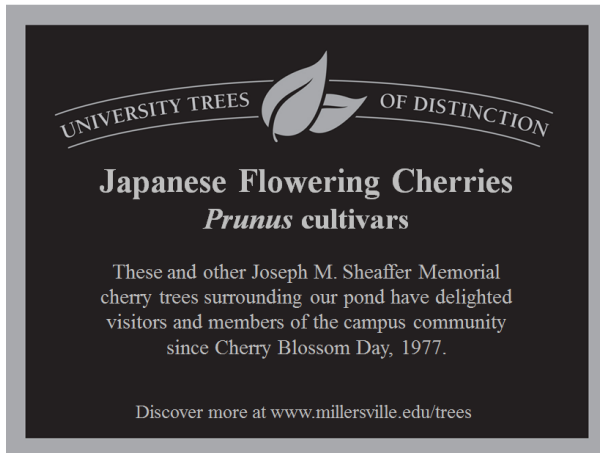


Fig 2. A sample image of one of the twenty-one 9 x 12 inch anodized aluminum plaques that were installed across campus to mark the University’s Trees of Distinction in August 2014.

The trees of distinction profiled here are those that are especially large, unique, or otherwise noteworthy such that their loss would have a noticeable negative impact on the aesthetics and educational value of the campus. Included among them are the campus’s tallest tree in cultivation

(a sycamore near the pond), The Joseph M. Sheaffer Memorial cherry trees surrounding the pond, a coconut palm and banana tree over in Roddy Hall, and the “Stinky but Special” female ginkgo tree near the former site of Hobbs Hall, for which an attempt will be made to move it to another location as necessitated by the ongoing construction of the new dormitories. It is hoped that the campus community will feel free to contact the author with any comments or with information or trees that they believe should be added to this atlas.

This *Parksia* article provides a set of aerial maps depicting the campus and the locations and descriptions of the 21 trees featured in this latest release (Figs 4-6). This article thereby serves as a printable, portable version of the website that readers can take with them on a tour of the trees of distinction on campus. For high-quality, color photographs of the trees, please visit the website to access Professor Cooney’s photographic album (Cooney 2014, *Parksia* 3: 5-13 at <http://herbarium.millersville.edu/parksia.php>).



Fig 3. Screenshot of the website’s information pop-up window for our Queen Sago, *Cycas cirinalis*. Each marker on the website’s map can be clicked to open an information window for the species. Each information window includes a thumbnail photograph of the tree by Pat Cooney. Full size images can be seen in Dr. Cooney’s photographic album (Cooney 2014, *Parksia* volume 3, pages 5-13 at <http://herbarium.millersville.edu/parksia.php>).

## Tree List & Description

### 1. A Coffee Tree from Kentucky?

**Female Kentucky coffee tree**  
(*Gymnocladus dioica*)

This member of the bean family produces unusually large, twice-(sometimes thrice-)pinnate leaves and large pods with large seeds nearly a quarter in diameter. American Indians and early settlers had many uses for this species, one of which was to use the roasted seeds to brew a coffee-like beverage.

**Height:** 50-60 ft / 15-17 m    **DBH:** ca. 11 in / 30 cm    **Age:** 40-50 yr

### 2. Semblance of an Old American Icon

**Chinese chestnut (*Castanea mollissima*)**

With its bark, leaves and edible nuts providing some semblance of our once-dominant American chestnut, this and other Asian species carried the chestnut blight fungus that brought the American chestnut to the brink of extinction in the early 1900s.

**Height:** ca. 30 ft / 9 m    **DBH:** ca. 15-22 in / 40-56 cm    **Age:** ca. 40 yr

### 3. A Gift from Japan

**Japanese flowering cherry**  
(*Prunus serrulata* and related cultivars)

This is one of a variety of hybrid Japanese flowering cherry trees around the pond guarded by Miller and Seville. The trees produce a spectacular display of blossoms in the spring. These Joseph M. Sheaffer Memorial Trees were gifted to the University by his daughter, MU Professor of English Dr. M.P.A. Sheaffer, and the Government of Japan on April 7, 1977. This day was Cherry Blossom Day at MU, which was highlighted by the planting of these trees, a visit by then Japanese Ambassador to the US, Mr.

Nobuyuki Nakashima, and various Japanese cultural presentations, including one titled "Japanese Festivals & Folks" by Dr. Sheaffer herself. Read more about these trees and this event in 1977's issue 25, volume 49 of the *Snapper*.

**Height:** various    **DBH:** various    **Age:** planted here April 7, 1977, but likely derived vegetatively from centuries-old grafting stock.

### 4. Our Tallest Tree

**Sycamore, American plane**  
(*Platanus occidentalis*)

Our tallest tree in cultivation. In nature, the vivid white branches of sycamores signal the courses of rivers or streams and the extent of their floodplains.

**Height:** 114 ft / 35 m    **DBH:** 59 in / 149 cm    **Age:** ca. 120-150 yr

### 5. A Living Fossil from the Age of Reptiles

**Male Ginkgo, Maidenhair tree (*Ginkgo biloba*)**

Truly a living fossil from the Age of Reptiles, ginkgo was once thought to be extinct and has a fossil record spanning nearly 270 million years.

**Height:** 35 ft / 10 m    **DBH:** 11 in / 28 cm    **Age:** ca. 14-22 yr

### 6. Behemoth Fir

**Nordmann fir (*Abies nordmanniana*)**

This was incorrectly identified as balsam fir in the first release of this site, but the discovery of a cone in July 2014 by the author quickly revealed that this was no balsam, since the cones of balsam fir are much smaller than those of Nordmann fir. Cones of firs are ephemeral structures that do not form until summer and fall apart before summer's end. That, in addition to

the fact that they are usually born high on the tree, make cones of firs elusive little buggers. The Nordmann fir is Native to the mountains surrounding the Black Sea, the Nordmann fir can reach impressive heights of nearly 280 feet (85 m), making it the largest fir in the Eastern hemisphere and among the tallest in the world. The species is valued as a source of timber, ornamentals and, increasingly, as a source of Christmas trees rivaling its close sibling, the Fraser fir, in quality.

**Height:** 78 ft / 24 m    **DBH:** 19-24 in / 49-56 cm  
**Age:** ca. 50-65 yr

## 7. Sweet and Southern

**Southern magnolia (*Magnolia grandiflora*)**

For producing the University's largest flowers up to 12 inches (30 cm) in diameter, and for lending this part of campus a more southern, even tropical flair with its large, glossy evergreen leaves and sweet floral scents. This species is native to the SE US, reaching its northernmost extent in coastal Maryland.

**Height:** 25-30 ft    **DBH:** 4-7 in / 10-14 cm  
**Age:** 25-35 yr

## 8. A Tree with Character

**Saucer magnolia (*Magnolia soulangeana*)**

A hybrid species of 19th century, French origin. Ours specimen assumes a leisurely posture and litters the ground with thousands of pink and white petals each spring and delightful shade in summer. Indeed, it is fitting that this tree, so rich with character, helps to frame the sign to Rafters Theatre.

**Height:** ca. 30 ft / 9 m    **DBH:** 4-7 in / 10-14 cm  
**Age:** 25-35 yr

## 9. Atlas Cedar

**Blue Atlas cedar (*Cedrus atlantica*)**

An evergreen conifer native to the Atlas Mountains of NW Africa, mountains which share their tectonic origins with our Appalachians in the formation of Pangea. Ours is a large specimen with a bluish, waxy covering to its needles. This and other true cedars such as the closely related Cedar-of-Lebanon are distinguished from other conifers by their evergreen needles tufted on short lateral shoots of the main branches.

**Height:** 35-45 ft / 11-14 m    **DBH:** 5-8 in / 12-16 cm  
**Age:** 30-40 yr

## 10. Executive Privilege

**Tuliptree (*Liriodendron tulipifera*)**

Here stands a towering member of the magnolia family cast in June with thousands of tulip-like flowers. The light wood of the large, straight trunks of tuliptrees made them a favorite with the Susquehannock for dugouts canoes and transit of the Susquehanna and its tributaries.

**Height:** 93 ft / 28 m    **DBH:** 46 in / 118 cm  
**Age:** ca. 114-118 yr

## 11. Our State Tree

**Eastern hemlock (*Tsuga canadensis*)**

Eastern or Canadian hemlock, our state tree, played a major role in Pennsylvania's economic development. Towns and economies developed in wilderness areas around the use of its tannin-rich bark to produce leather. The wood was used to make paper, boxes and crates.

**Height:** 58 ft / 18 m    **DBH:** 20 in / 51 cm  
**Age:** ca. 40-50 yr



## 12. Stately Oak

### English oak (*Quercus robur*)

A European & north African species planted globally for ornament and wood, and capable of living longer than 1000 years. Ours is a stately specimen that has witnessed our erstwhile normal school grow into a university.

**Height:** 50-65 ft / 15-19 m    **DBH:** 5 1/2 ft / 1.7 m    **Age:** 160-200 yr

## 13. A Springtime American Icon

### Flowering dogwood (*Cornus florida*)

Japan's 1912 gift of flowering cherry trees to the United States has twice been reciprocated with a gift of flowering dogwoods. Iconic of spring in eastern North America, dogwood flowers are reported to have cued the planting of maize by American Indians. The wood of dogwood is especially hard, being used for bearings, wheel hubs, tool and dagger handles.

**Height:** 19-25 ft / 5-8 m    **DBH:** 4-7 in / 11-18 cm    **Age:** 45-55 yr

## 14. Charming Couple

### London plane, Hybrid sycamore (*Platanus acerifolia*)

Here stands a pair of London planes, each one a large yet elegant tree of distinction in its own right, but together much more. The species, a hybrid between our *P. occidentalis* and the Asian *P. orientalis*, is renowned for its stature, mottled bark and resiliency in cultivation.

**Height:** 75-90 ft / 21-    **DBH:** TBD    **Age:** TBD

## 15. Walnut Grove

### Black walnut (*Juglans nigra*)

This grove of black walnuts is a popular destination of botany faculty and students for the harvest of walnuts. In addition to the use of its

fruit as a natural dye source, this native species is valued for its dark heartwood, edible seeds and, increasingly for various industrial applications, the fruits sclerified endocarp surrounding the seed.

**Height:** 60-70 ft / 20-23 m    **DBH:** 12-16 in / 32-42 cm    **Age:** 30-40 yr

## 16. A Taste of Persia

### Persian walnut (*Juglans regia*)

A tree of distinction because it allows the campus community a study of an extremely important crop species. This Asian species provides the familiar walnut available in stores and baked goods worldwide. Persian walnuts have a milder taste than our equally edible native black walnut.

**Height:** 40-50 ft    **DBH:** 13-17 in / 34-42 cm    **Age:** 45-55 yr

## 17. Stinky but Special

### Female Ginkgo, Maidenhair tree (*Ginkgo biloba*)

Female ginkgos' foul-smelling seeds make them a rare choice in American landscapes. We are fortunate to have this specimen and the opportunity to study a unique and ancient seed biology that originated some 270 mya, long before the first mammalian or avian pollinators and seed-dispersers.

**Height:** 26 ft / 8 m    **DBH:** 8 in / 20 cm    **Age:** ca. 14-22 yr

## 18. A Living Fossil Redwood

### Dawn redwood (*Metasequoia glyptostroboides*)

A tree of distinction for multiple reasons. Firstly, dawn redwood was known only from fossils prior to its being found alive in China in the 1940s. Second, it is a rare example of a deciduous conifer. Lastly, it offers us easterners a semblance

of its close relative, the great coastal redwood of California and Oregon.

**Height:** 65-80 ft    **DBH:** 12-17 in / 30-40 cm  
**Age:** ca. 35-45 yr

### 19. Tropical Island Treat Coconut palm (*Cocos nucifera*)

The coconut palm, iconic of tropical beaches around the world, produces the vegetable kingdom's second-largest seed and humanity's most versatile and widely used plant. This specimen was collected as a seedling in 2007 on a botanical expedition to the southeastern United States and Caribbean. It is accompanied in the stairwell area joining Roddy and Caputo Halls by an adjacent glass-encased exhibit of preserved specimens and ethnobotanical artifacts.

**Height:** 8 ft or 2.5 m    **DBH:** 0 (no stem at breast height)    **Age:** 8 yr

### 20. An Important Tropical Crop Dwarf Cavendish banana (*Musa acuminata* cv. Dwarf Cavendish)

The Dwarf Cavendish cultivar is the source of our familiar grocery store banana. Although common today, bananas were anything but common not so long ago. This yellow berry was introduced as an exotic delicacy to Americans at the 1876 world's fair in Philadelphia.

**Height:** 8-9 ft / 2.5-3.0 m    **DBH:** 0 (no above-ground stem)    **Age:** ca. 22-35 yr residency at MU, but derived vegetatively from stock likely to be 85-100 yr old.

### 21. Endangered Endemic Queen Sago (*Cycas circinalis*)

The queen sago cycad is an endangered species endemic to South Asia, where its toxic yet starchy seeds have been used to make an edible flour after removal of the toxins. The primitive motile sperm and fern-like foliage of cycads provide a strong link to the earliest seed plants some 300 mya.

**Height:** 10 ft / 3 m    **DBH:** 6 in / 16 cm  
**Age:** Established 35 yr ago as a cutting from one from the Franklin & Marshall greenhouse.

**MAP FIGURES 4-6 TO FOLLOW...**

### HOW TO CITE THIS ARTICLE

Hardy CR. 2015. Millersville University's Trees of Distinction in 2015 ([www.wikiplantatlas.org/trees](http://www.wikiplantatlas.org/trees)). *Parksia* 4: 1-10. Available at <http://herbarium.millersville.edu>.

First published April 17, 2015,  
 Revision published April 24, 2015.



**Fig 4. The Pond area between Wickersham and Dutcher Halls.** The marker numbers here correspond to trees 1-11 in the list of the preceding text. Aerial imagery provided by Google Maps API version 3.





Fig 5. The area south of the Library and Frederick Street. The marker numbers here correspond to trees 12-17 in the list of the preceding text. Aerial imagery provided by Google Maps API version 3.





Fig 6. East Campus, the area surrounding Breidenstine and Roddy-Caputo Halls. The marker numbers here correspond to trees 18-21 in the list of the preceding text. Aerial imagery provided by Google Maps API version 3

**PARKSIA***Editor*

Christopher R. Hardy

James C. Parks Herbarium, Department of Biology, Millersville University of Pennsylvania, PO  
Box 1002, Millersville, Pennsylvania, 17551, United States of America

*About Parksia*

*Parksia* is published periodically by the James C. Parks Herbarium of The Department of Biology, Millersville University of Pennsylvania. It is dedicated to publishing short encyclopedic articles and essays containing useful information about plants. *Parksia* is available for free, on the Web at <http://herbarium.millersville.edu>. The street mailing address for the Herbarium is James C. Parks Herbarium, Department of Biology, Millersville University of Pennsylvania, 288 Roddy Science Building, 50 E Frederick St, Millersville, Pennsylvania, 17551, United States of America.

*Contributions*

If you are interested in contributing to *Parksia*, please send correspondence to the *Editor* at the address above.