Volunteer
Morris Arboretum of the University of Pennsylvania

Volunteer is a newsletter published monthly for Arboretum volunteers.

The Morris Arboretum of the University of Pennsylvania is an historic public garden and educational institution. It promotes an understanding of the relationship between plants, people, and place through programs that integrate science, art, and the humanities. The Arboretum conducts four major activities: education, research, outreach, and horticultural display. As the official Arboretum of the Commonwealth of Pennsylvania, the Morris Arboretum of the University of Pennsylvania provides research and outreach services to state agencies, community institutions and to citizens of Pennsylvania and beyond.

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Volunteer
Pilar Rivera, Editor

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Photos: Pilar Rivera, unless otherwise stated

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Cornus florida ‘Appalachian Spring’
Appalachian Spring flowering dogwood

Tilia heterophylla, beetree linden
Letter from the Editor

Have you seen the gorgeous autumn color at the Arboretum yet? It is amazing to watch the season progress from yellow to orange to fiery red. I had no idea that fall would be so stunning and varied! The view from my window changes every day, and each tree has a different hue than the next.

The fact that each plant species has its own unique fall display makes me think about the individuality of each of our staff and volunteers. Everyone has something uniquely special to offer, like an impressive knowledge of plants, a great sense of humor, the ability to lead others, and the list goes on.

Thank you for offering up your unique skills and talents! The Arboretum would not be as beautiful, strong, or colorful without the collaboration of our staff and volunteers.

Happy Fall,

Pilar Rivera
The McLean Contributionship
Endowed Education Intern
Hello Everyone,

For several years, I have been a judge in the City Garden Contest. We have seen some spectacular gardens full of creative plants and ideas, but this year one garden in particular stands out. This is the city garden of Lindsey Wilson and Jacob (Jake) Winegrad. What is so amazing about this garden is that it's only one year old! Lindsey and Jake, both childhood gardeners, were approached by a neighbor to see if they wanted to take over her garden lease from the city. Lindsey is from rural Michigan where she helped on her grandmother’s farm, and Jake is from Havertown where he helped his parents with gardening and landscape projects. They jumped right in and are very grateful for all the previous work of their friend. Their neighbor spent three years petitioning the city and working to clear the space of debris. As you can see by the “before” picture (page 3), there was plenty of work to be done.

Lindsey and Jake made an agreement with the city to take care of the space, with a few stipulations. For instance, they cannot sell food or drink on the property. They do find that the lease offers fewer restrictions than expected; gardeners are allowed a great deal of flexibility in Philadelphia. If you are interested, “Grounded in Philly” has a lot of information and resources for people looking for a vacant space.

The young couple decided to go with raised beds for the garden. The frames are built from reclaimed pallets, using some as-is and others stripped down and modified to fit. The pallets were of heat-treated wood, thus avoiding chemical contamination in their soil. After assembling the boxes, they were lined with upcycled food-grade plastic bags while the outsides were covered in burlap sacks sourced from Greenstreet Coffee Roasters. The planters were filled with compost (worm castings added periodically), and the ground was covered with mulch from the Fairmount Recycling Center. They found scrap wood and a few other building materials in construction site dumpsters around the neighborhood. Their 12”x12” stepping stones were another dumpster find.

All planters were placed with the maximum amount of sunlight available between two buildings, choosing plants that were well-suited with the light available while putting complementary plants together. They were highly successful with the seeds planted. They had 30 varieties of vegetables including tomatoes, cucumbers, squash, cooking and salad greens, basil, dill, peppers, and tropical beans. Their favorites were ‘Osaka Purple’ mustard greens, ‘Boothby Blonde’ cucumbers, and ‘Asparagus Red-Podded’ beans. They have introduced their neighbors to a wide range of heirloom vegetables.

continued on page 3...
Jake and Lindsey loved every second of the first growing season and are looking forward to next year. Their neighbors have been, on the whole, very enthusiastic and supportive. This couple has taken a vacant lot, and put in a lot of effort and some expense to create a lovely garden of beautiful plants. We are starting a sustainability tour at the Arboretum, and this garden is the perfect example of “reduce, reuse and recycle”, which should be the goal of all our gardens. Thank you Lindsey and Jake for sharing your garden.

Happy Gardening,

Jody Sprague
Chair of the Guides
Water Issues In California
Rebecca Conrad’s third and final installment highlights the effects of drought on gardening.

For California gardeners, the four year drought and the resulting restrictions on outdoor water use have been difficult to adjust to. In order for the city of Davis to reach its goal of decreasing water use by 28% (of the 2013 consumption), it has limited the number of irrigation days to three per week and required that irrigation occur only at night. To further decrease water use, homeowners have been encouraged to let their lawns go brown or replace the lawn with drought-tolerant plants. Some homeowners have responded by shutting off all irrigation. This has resulted in many brown lawns, but also in many dead trees that had been surviving on water from grass irrigation.

Even if a garden has mostly drought tolerant plants some irrigation is needed, especially during the first two years when the root systems are being established. Irrigation systems seem to be fraught with problems and require constant maintenance. This summer we had two bad irrigation leaks. We were alerted to one leak by a neighbor who noticed water from our yard running into her yard and the other leak when the 4” layer of mulch didn’t dry out and the plants looked exceptionally good.

Another difficulty is the soil type. It is clay, and not like the forgiving Philadelphia loam. The first time I tried to put a plant in the ground I barely scratched the surface of the ground with a trowel. I soon learned that I had to slowly pre-soak the ground before I could get a shovel into the soil. It was about then that I decided that I needed professional help to get rid of my lawn and design a drought-tolerant garden.

Unlike Philadelphia, Davis has few choices when selecting plants for the garden. The most valuable resource has been the Arboretum at the University of California at Davis. Ten years ago the UCD Arboretum tested plants and worked out a plant list of 100 All-Stars. These are plants that are drought tolerant, have few pests or diseases, are easy to grow, and look great in the garden. Many, but not all, are native to the immediate area or to the Southwest.

Our new garden was finished in June 2014. It has been interesting to see which plants have done well and which have not. Fortunately, the *Olea europa* ‘Swan Hill’ (Swan Hill olive), which was transplanted as a 12’ multi-trunked tree is a survivor. Others such as *Hesperaloe parviflora* (red yucca), *Eriogonum giganteum* (St. Catherine’s lace), and *Muhlenbergia capillaris* (pink Muhly grass) are thriving. The plant that is causing the greatest worry is the *Arbutus unedo* (strawberry tree). Since being planted it has not done well, and now about 50% of the leaves are a russet brown. The tree consultant says the roots never developed past the root ball, and that even though the clay soil around it is wet, the root ball itself does not get enough water. Hand watering every other day might save it. Just what we wanted to hear in June of this year!

Everyone here is hoping that this will be a big El Niño year and that soon we will have a respite from the short-term challenges of the drought. However, there is the long term uncertainty that all California residents face of not knowing how severe the drought will be and how sustainable the groundwater resources are.

-Rebecca Conrad
Volunteer Opportunities

- *Guides Roundtable Discussion* -

This will be a first-time opportunity for all guides to participate in roundtable discussions. There will be 3 different topics. Everyone will have a chance to discuss each topic, moving after 20 minutes from one table to the next topic table. This is a time for you to meet and discuss issues pertaining to your guiding experience with your fellow guides. We will stop for lunch at noon. Bring a brown bag lunch; drinks and dessert will be provided. Come early for meet-and-greet.

**Tuesday, November 10th | 10:15am | Upper Gallery**

*Cosmos bipinnatus, Mexican aster*

- *Volunteer Trip to W. B. Saul High School for Agricultural Sciences* -

After a decade of hosting Saul students, we're going to their place for a tour of their campus and farm! The Agro-ecology and Landscape students will show us the 1.5 acre fruit and nut orchard, describe the new Community Design Collaborative campus plans, and tell us about their compost business. Saul is the largest agriculture high school in the country, with award-winning teachers. Join us to learn more about this Philadelphia treasure. Sign up via the TeamUp calendar, or contact Lisa Bailey at BaileyL@upenn.edu or 215-247-5777 x 157. Vans are reserved but you are welcome to drive to Saul, just let Lisa know you’re going.

**Monday, November 16th | 12:30pm | Meadow Parking**

*photo courtesy Jessica McAtamney*
Volunteer Opportunities

Volunteer Writers Wanted!

Are you an avid gardener, nature enthusiast, or traveler looking to share your expertise and adventures? We are currently seeking guest writers for Volunteer. Please email Pilar, pilarr@upenn.edu if you are interested in contributing!

Staff & Volunteer Evening at the Holiday Garden Rail

Enjoy the Holiday Garden Rail decked out for the season on this special evening reserved for volunteers, staff and their families.

Thursday, December 3rd | 4:30-7:30pm

Fall Gardening Day at the Governor’s Residence

On Monday, October 5th Arboretum staff and volunteers participated in a fall clean-up day in the Governor’s Residence garden in Harrisburg. This marks the 8th time that the Arboretum has participated in this activity. As the official Arboretum of the Commonwealth, it is one way that we help one of Pennsylvania’s most important public gardens.

At 7 am that day, 16 horticulture volunteers and 16 Arboretum staff departed by bus for Harrisburg. Upon arrival at the Governor’s Residence, the Arboretum team worked in the garden, performing tasks such as dividing perennials and pruning trees and shrubs.

The Governor’s Residence Preservation Committee underwrote the cost of bus transportation for the group, and after the work session, residence staff graciously provided lunch and a tour of the Governor’s Residence. Arboretum Executive Director Paul Meyer has served on the Preservation Committee since 1977.
Notes from the Horticulture Committee Meeting - October 12, 2015

by Larry Godley

**Horticulture Department Update**

Tony Aiello participated in a three week tour of China with a consortium of other arboreta that were studying native populations of *Acer griseum*, paper bark maple. The species is endangered in its native habitat in China, partly because it produces many seeds that are not viable. The group brought back many leaf samples for DNA testing, and found two trees with seed.

Tony reported that fall planting is progressing in spite of being delayed by drought. The new horticulture interns will introduce their intern projects for review at the next Horticulture Committee meeting.

**Tree Care Program**

Tony Aiello introduced a new fundraising proposal for tree care at the Arboretum. The goal is to supplement existing resources so that we can restore the Chief Arborist position, a mission-critical staff position. At the same time, we need additional funds to allow us to contract large-scale arboriculture work that is beyond our capacity to complete.

For the past six years, the Arboretum has been without a Chief Arborist. The position is critical to maintaining the Arboretum’s tree collection, leading our Arboriculture education programs, and restoring our leadership role in managing a dynamic tree collection. Currently, we have a two-man arborist crew; this greatly limits our ability to complete tree work if one member of the team is off-site. Restoring a complement of three arborists would give us the opportunity to better achieve our arboriculture goals.

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**First Wednesday Workshops**

Join us for our final First Wednesday Workshop of the year!

*Meet at 12:30pm at the Widener Terrace*

November 4th  **Ornamental Grasses** with Lucy Dinsmore

*November 4 will be the last First Wednesday Workshop of the year. First Wednesdays will resume on February 3, 2016.*
Continuing Education

- Upcoming Classes -

Join us for these exciting upcoming classes!
To register online, visit https://online.morrisarboretum.org/classes, or call (215) 247-5777 ext. 125

**Getting and Giving- Tales of Cooking Seasonally and Eating Well for the Holidays**

**Wednesday, November 11th, 2:00pm**
Instructors: Christopher Hirsheimer and Melissa Hamilton, Owners of Canal House

Hirsheimer and Hamilton will share stories from their travels around the world, and from our own beautiful corner of the Northeast where they use ingredients found in most markets, while building relationships with the people who grow, raise and sell the foods we eat.

**Behind the Scenes at the Academy of Natural Sciences**

**Friday, November 13th, 9:00am-3:00pm**
Instructor: Ruth Pfeffer, Expert Birder and Trip Leader

The Academy is the oldest natural science institution in the Western Hemisphere. Its collection contains over 17 million specimens. Join us as we view bird and insect specimens from around the world, and priceless books in the Academy's library.

**Birding at F.D.R. Park, a Philadelphia Hotspot for Birds**

**Wednesday, November 11th - 2:00pm**
Instructor: Keith Russell, Audubon Pennsylvania Program Manager for Urban Conservation

F.D.R. Park is a 75-acre park, and is a designated Important Bird Area, IBA. We hope to see a variety of ducks including northern shovelers, gadwall, and American wigeons.
Approved Classes for Education
Volunteer Hours

Continuing Education

There is one more class this semester that offers Education volunteer class hours. Register today!

To register online, visit https://online.morrisarboretum.org/classes or call (215) 247-5777 ext. 125

Morris Treasures at the Penn Museum
with Anthony Aiello
Friday, November 6, 9 a.m.

Volunteers who have given a minimum of 30 hours over the past year may take these and any other courses at a discounted price. Please refer to the Volunteer Price Spreadsheet in the Education office for a list of the discounted course prices available to Arboretum volunteers.
Story From the Archives

Step Fountain: Notes on the First 100 Years, By Bob Gutowski

We celebrate the 100th anniversary of the Step Fountain in the English Park in 2016. John and Lydia Morris added the English Park to their estate in 1910. They began planting it with new acquisitions from the Arnold Arboretum's China expeditions and expanding their collection of water features - a passion of John's that was fed by his engineering training and the I. P. Morris manufacturing expertise with water pumps and water systems.

The garden hillsides lent themselves to falling water. Travels to gardens of Italy, France, Russia and Japan provided ideas to embellish their new hillside park with the sounds, sights and cultural associations of water features. A pump under Seven Arches (built in 1911) drew water from a deep well to a cistern supplying the fountains and ornamental streams.

A large American chestnut tree stood at the opposite end of the Park, and downhill from Seven Arches. The majestic chestnut became the central feature in a circular garden with lawn pathways linking the Park to Compton's existing landscape. The garden displayed labeled collections of clematis, peonies, rhododendrons and new Chinese plants. In 1912 the chestnut fell to chestnut blight. A tulip-tree replaced it.

The Loggia built in 1913 celebrated John's and Lydia's 25 years at Compton. The Loggia's sight line to the tulip-tree was a designed element typical of the Georgian gardens and Downing-style landscape on which the English Park is modeled.

John Morris died suddenly in 1915. His dear sister Lydia assumed the role of planning for the garden. Lydia commissioned Robert R. McGoodwin (1886-1967) to design the Step Fountain. Some believe the Step Fountain was a memorial to her beloved brother John. It is easy to conceive this sentimental association, even if there was already intent to introduce such a feature in this place.

Robert McGoodwin was a successful and versatile residential architect, designing many homes in Chestnut Hill. McGoodwin was a 1907 architecture graduate from the University of Pennsylvania in the program established by T. P. Chandler, Jr. who designed the Compton mansion. McGoodwin taught at the University where he designed several buildings. The Step Fountain reflects his training at the École des Beaux-Arts and the fashion of the time.

When the Step Fountain was completed, all the water features in the Park were connected: Seven Arches, Japanese Overlook Garden pond and stream, Loggia fountains and Ravine garden stream and pools, Key Fountain and waterfall, and Step Fountain.

September 8, 1988 was a momentous day for the Step Fountain: celebrating its restoration and dedicating the sculpture “After B. K. S. Iyengar.” Ceremonies included comments from the Ambassador of India, the artist Robert Engman and a lecture demonstration of yoga on the fountain balustrade by B. K. S. Iyengar.

After a century of winter freezes, summer waterfalls and treading feet, the Step Fountain is due for restoration. One of the most photographed garden features, pictures may not reveal condition issues that must be addressed if it is to continue to contribute to the historic and aesthetic fabric of the garden.
Garden Highlights

Dianthus gratianopolitanus
‘Firewitch’
near Rose Garden

Viburnum dilatatum
Linden viburnum
Nyssa slope

Asclepias syriaca
common milkweed
meadow

Ilex ‘Rutzan’
RED BEAUTY holly
near Garden Railway

Cornus florida ‘Appalachian Spring’
Appalachian Spring flowering dogwood
near Fernery
## Upcoming Events

### November

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### Weekly Volunteer Events

- **Wednesdays:** Horticulture Volunteers 8:30am - 12pm
- **Saturdays and Sundays:** Regular Tour 2:00pm - 3:00pm

**Volunteer**

**November 2015**
### Upcoming Events

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