

VOLUNTEER

October 2015



Morris Arboretum
UNIVERSITY of PENNSYLVANIA

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
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Photos: Pilar Rivera, unless otherwise stated



Oak Allée Roots Exhibit

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Oak Allée Roots Exhibit

Letter from the Editor

“You are your own worst critic.” That’s what my mom used to tell me all the time, since I was a child perfectionist (and still am to a degree). I would quit painting ceramics when I made the wrong brushstroke, and wouldn’t even attempt to plant a vegetable garden for fear of killing a plant. It’s tough to feel motivated to try something new when you’re worried that the result will be sub-par.

Nevertheless, Mom was right (again) and the same ceramic piece made a beautiful gift that was received with “oohs” and “ahhs”, and my vegetable garden wasn’t pretty but it produced some delicious tomatoes!

I encourage you to try something new this month- I sure will! Get outside while the weather is nice and photograph those elusive birds, paint that imperfect landscape, or build a crooked birdhouse. Life is too short to worry about the result when the journey itself is so rewarding. What new endeavor will you attempt this month?

Enjoy the journey,

Pilar Rivera

*The McLean Contributionship
Endowed Education Intern*



Cercis chinensis 'Avondale', Avondale Chinese redbud

Note from the Guides Chair

Hello Everyone,

This summer it seemed as if I was weeding maple seedlings all the time. Then I read an article in *Horticulture* about a tree phenomenon called a mast year. Mast years happen every three to five years, when wind-pollinated forest trees go on a reproductive binge and produce a large amount of nuts or seeds. Mast years happen with not just one tree species but several, including oaks, white spruce, sugar maples, beech trees and hickories. The author thought it was spooky that all these trees in the forest get together in synch to produce a boom crop of seeds. This phenomenon has puzzled scientist for years.

Now thankfully an MIT-trained materials engineer, U.S. naval officer and naturalist William Needham, has posted his observations of nature online at hikersnotebook.net. He wondered why an individual tree would go through a boom-and-bust cycle and how they coordinate their activities over large areas and across different species.

Forest scientists have hypothesized that the trees are responding to greater resources, such as wet years that promote decomposition of forest duff and keep the tree hydrated, thus producing more nuts. Nevertheless, Needham found that variations in the weather do not correlate with masting. Scientists have also hypothesized that masting occurs because trees are managing creatures that like to eat tree nuts and seeds. The trees withhold food in non-mast years, starving some of the predators. Once again, evidence of that hypothesis has been inconclusive.

Masting occurs on a large scale. A 1994-2005 study of blue oaks at ten separate sites over 434 miles in California found that masting occurred in virtually every one of the 100 million trees. A UC-Berkeley study of 72 sites over 1,553 miles found that synchronization of seed production was statistically significant in all of them. So how does this happen? One theory is that pollen may carry information from tree to tree, but recent studies show pollen is only effective in a range of about 60 meters. According to Needham, "It's likely that wide-ranging climate conditions, such as the periodic fluctuations of temperatures (perhaps caused by the cyclic El Niño phenomenon) operate in synchronization with masting over the same geographic area."

Mast years don't just occur in California. According to the article, this year is a mast year for sugar maples and other wind-pollinated trees east of the Rockies. I had never heard of the term masting before, but I know I have seen a huge number of maple seeds in my garden this year. We even have had maple trees growing in our gutters for the first time. We may not live in a forest but I believe in masting.

Happy Gardening,
Jody Sprague
Chair of the Guides

Water Issues In California

Our long-time education volunteer and friend, Rebecca Conrad, is writing a series of articles about the drought in California. This second installment focuses on the reduction of water use indoors.

In the community where we live, the city has had a series of workshops to offer suggestions on ways to save water. Some of the ideas that my husband and I are using in our household came from these workshops. It is easiest to think about reducing water use if the topic is divided into indoor and outdoor water use. Our household has been most successful in reducing indoor water use and I will discuss that in this article.

There are various ways that appliances and plumbing can be arranged to help with reducing household water use. If one has just moved to the area and needs to buy a new washing machine anyway, a front loader can save five gallons of water per load. Buying a new washing machine is by far the easiest and most fun way to decrease water use! Also important is doing a wash only if you have a full load.

In the bathroom, installing a low flow toilet or low and high flush buttons can save water. We did this when we first moved to California, but now the state of California is offering a \$100 rebate to residents who replace a toilet that uses more than 1.6 gallons per flush. There are 60,000 of these rebates available. A low flow shower head that uses 2.5 gallons per minute is the standard now and will decrease to 1.8 gallons per minute in 2018. However, measuring the gallons per minute of our shower head proved to be tricky. Ideally, shutting off the shower while soaping up, the way it is done in Europe, would save water. Most of my friends and I have not managed to do this yet. Of course, not leaving the water running while brushing teeth, requires less retraining.

Another technique to reduce water use is to reuse it. We put a pail in the shower to catch the warm water and then use it on plants. In the kitchen, we have a pitcher in the sink to collect the water that was used to rinse soapy dishes or wash vegetables. We use biodegradable dish liquid so the water can then be used on plants. The saved water in the kitchen can also be used to rinse dishes or pots before their final washing.

The above techniques are labor intensive and don't include all the grey water that could be available. Some residents have installed a gravity system which takes water discharging from the washing machine to the garden. This system only works if the washing machine is situated on an outside wall and the plant to be irrigated is a shrub or tree which can tolerate a lot of water all at once, when a wash is done.

Future homes may include dual plumbing systems that will capture grey water to be stored in a holding tank where it can be used on demand for various parts of the garden. However, no system can capture enough grey water to completely irrigate a garden unless the garden is exceptionally drought tolerant. In our experience, the amount of water used is about 20% indoors and 80% outdoors.

In the next article, I'll discuss outdoor water usage.

-Rebecca Conrad

Volunteer Opportunities

Fall Festival: Saturday & Sunday, October 3rd & 4th

To volunteer during Fall Festival:

please contact Michelle Conners, mconners@upenn.edu or 215-247-5777 x109

Available shifts for pumpkin painting or scarecrow supply table:

Saturday, October 3rd: 10am-12:30pm or 12:30pm-3pm

Sunday, October 4th: 10am-12:30pm or 12:30pm-3pm

To volunteer before or after Fall Festival:

please contact Marie Ingegneri, mmercald@upenn.edu or 215-247-5777 x181

Opportunities include ballot counting, receiving/returning finished scarecrows, and helping with scarecrow installation.



- Trip to the High Line and Battery Park -

The High Line is an elevated park developed on a defunct rail line that runs from Gansevoort Street to the West 34th Street rail yard. We'll stop for lunch at the Chelsea Market, and then get a guided tour of Battery Park. The bus will depart at 7:45am and return to the Arboretum at 5:30pm. Trip price is \$40 per person. Please contact Michelle Conners **before October 9** to reserve a spot for the trip, mconners@upenn.edu or 215-247-5777 x109.

Trip registration will be open to guests after October 9.

Thursday, October 22nd | 7:45am | Meadow Parking



photo courtesy Paul Meyer

Volunteer Opportunities

- Trees on Trial Tour Practice -

The Trees on Trial Tour, given last year during Bloomfield Farm Day, will be available again for visitors on Sunday, October 18th. The Great Plants Committee that developed the tour needs your help presenting it. Please meet them on Wednesday, October 7th in the Bloomfield Farm parking lot. They'll go through the tour and give attending guides a handout. This practice is open to anyone, but if you're available on Bloomfield Farm Day, please sign up to for a shift!

Wednesday, October 7th | 10:30am-noon | Bloomfield Farm



Castanea mollissima, Chinese chestnut

- 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.

Tuesday, November 10th | 10:30am | Upper Gallery



Cosmos bipinnatus, Mexican aster

Volunteer Workshops

- 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 an amazing school, the largest ag high school in the country, with award-winning teachers. Join us to learn more about this Philadelphia treasure.

Please RSVP to Lisa Bailey at baileyL@upenn.edu or 215-247-5777 x 157. Two 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 Jess Mac

First Wednesday Workshops

Join us the first Wednesday of every month for exciting workshops, talks, and tours.

Meet at 12:30pm at the Widener Terrace, unless otherwise noted

October 7th ***Tour of the Grist Mill*** with Ted Bell
**park at Bloomfield Farm*

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

- Connections Beyond Our Garden -

Join us for this series of talks, now in its 6th year, about how plants and gardens connect us to the larger world. These classes will make connections, and share impacts from different perspectives. To register online, visit <https://online.morrisarboretum.org/classes>, or call (215) 247-5777 ext. 125

Tropical Conservation via Biodiversity Development: A Real World Case from Costa Rica

Wednesday, October 7th - 2:00pm

*Instructor: Daniel Janzen, DiMaura Professor of
Conservation Biology, University of Pennsylvania*

How can society use tropical wildlands, and all of their biodiversity, without destroying them? That is the question that Janzen and his wife, Dr. Winnie Hallwachs, are devoted to answering through their field work in Costa Rica at Area de Conservacion, Guanacaste.



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, building relationships with the people who grow, craft, raise, and sell the foods we eat.

Continuing Education

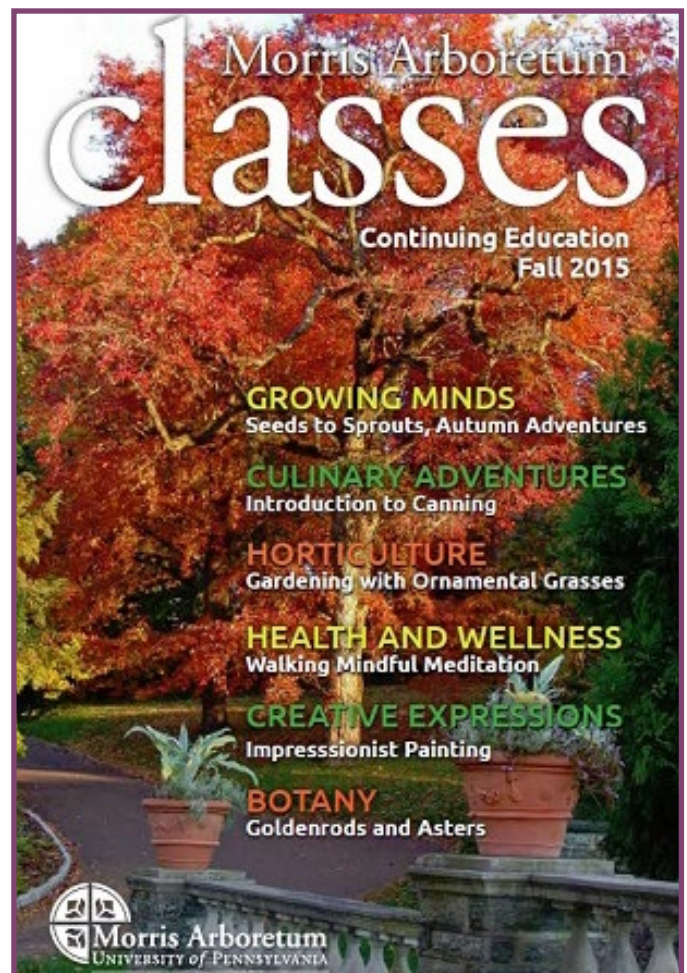
Approved Classes for Education Volunteer Workshop Hours

Fall registration is open! We offer a variety of classes that are eligible for Education volunteer workshop hours. Below is a list of upcoming approved courses. To register online, visit <https://online.morrisarboretum.org/classes>, or call (215) 247-5777 ext. 125

**Stories from the
Morris Arboretum Archives**
with Leslie Morris-Smith
Wednesday, October 21, 7 p.m.

Winter Tree Identification
with Tim Block
Tuesday, November 3, 10 a.m.

**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

Although most of the diary kept by Louise Kellner during John and Lydia Morris's trip around the world is a record of their daily experiences, there are sufficient anecdotes to reveal the dynamics of John's relationship with Lydia. Several entries indicate that Mr. Morris read this diary as it was being written. He advised Miss Kellner to record certain experiences but she never indicates that he berated her for entries she made about him.

Dec 26, 1889 - Train to Jeypore, India

"What an interesting trip it was! There were monkeys in their native state, huge fellows sitting, standing, jumping, on the tree... one big fellow had the whole family around him, holding the baby in his arms, they all did look too droll for anything... Large herds of camels we saw... And the parrots were flying around at large, all these scenes were repeated in various ways all day long... and all was so strange and so pleasing that Mr. Morris almost forgot to grumble that he had left home, only got a little spell of it at dusk, which Miss Morris, sensible as she always is, nipped in the bud, and so we travelled on peacefully."

April 1, 1890 - Kyoto, Japan

"Mr. Morris this morning was not ready when I appeared at 9 o'clock to go to breakfast with him, the reason of which was that he had been lying in bed to hold a consultation with himself as to how the time on hand would be spent in Japan, and the result was that he threatened to go home in June, as he could not persuade himself that he could spin it out any longer, but Miss Morris would not listen to him at all, and so he had to give it up for the present..."

April 9, 1890 - Kyoto, Japan

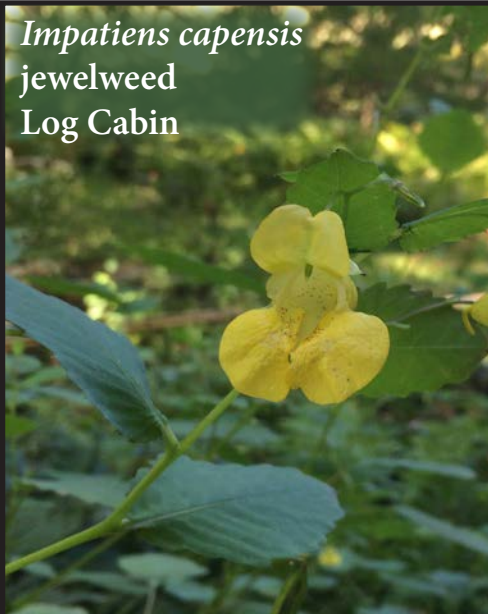
"Well, finally we were rewarded by the arrival of the Micado [sic] in one carriage, and the empress in the next one, and the doors of the canal were then opened. The Emperor spied us three foreigners pretty soon, and he looked at us again and again, just like all his subjects- as if we were "on show", and the empress kept her eyes in awe & wonder on Mr. Morris, whose height seemed almost too much for her, we were very much amused over it, and Miss Morris accused her brother, when the empress looked at him so intently, that he straightened himself out and buttoned up in quite a soldierly manner."



*Sando Komainu (Stone Korean Dog)
from Nara, Japan, photo courtesy
Morris Arboretum Archives*

Garden Highlights

Impatiens capensis
jewelweed
Log Cabin



Ilex verticillata 'Sunset'
Sunset winterberry holly
Oak Allée



Vaccinium macrocarpon
American cranberry
Greenhouse Courtyard



Ageratum houstonianum
floss flower
Cottage Garden



Acer truncatum
purpleblow maple
near Fernery



Upcoming Events

October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Small Trees Tour 10:30am Guides Council 1:30pm	2	3 Fall Festival 10am-3pm
4 Fall Festival 10am-3pm	5 Gardening Day at Governor's Residence	6 Training Committee 1-2:30pm	7 Hort Volunteers with Tracy Trees on Trial Refresher 10:30am-noon Tour of Grist Mill 12:30pm	8	9	10 Mill Volunteer Work Day Small Trees Tour 11:00am
11	12	13	14 Hort Volunteers with Lucy	15	16	17
18 Bloomfield Farm Day Noon-4pm	19	20	21 Hort Volunteers with Louise	22 Trip to NYC High Line 7:45am- 5:30pm	23	24 Small Trees Tour 11:00am
25	26	27	28 Hort Volunteers with Kate	29	30	31

Weekly Volunteer Events

Wednesdays: Horticulture Volunteers 8:30am- 12pm

Saturdays and Sundays: Regular Tour 2:00pm - 3:00pm

Saturdays and Sundays: Welcome Cart 11am - 3pm

Upcoming Events

November

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4 Hort Volunteers with Louise	5 Guides Council 1:30pm	6	7
8	9	10 Guides Round Table Discussion 10:30am- 1:30pm	11 Hort Volunteers with Vince	12	13	14 Mill Volunteer Workday
15	16 Trip to Saul High School 12:30pm	17	18 Hort Volunteers with Paul	19	20	21
22	23	24	25 Hort Volunteers with Lucy	26 Arboretum Closed	27 Arboretum Open, Offices Closed	28
29	30					

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