

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 a 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 Sarah Bolivar, Editor

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Questions, comments, and submissions can be directed to the editor at mabxeduc@exchange.upenn.edu or mailed to the Arboretum Attn: Education Intern.

Front Cover: *Sorbaria sorbifolia* var. *stellipila* Photos throughout: Sarah Bolivar unless otherwise stated



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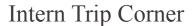
Letter from the Editor April 2013

There is much excitement in the air and it's partly due to delicate flowers blooming and partly due to bugs, Big Bugs that is, making their way across the Arboretum. If you have not seen these creatures, they have quite the hefty presence! Cherry Blossom festival celebrations, Arbor Day activities, and bugs (plus one gentle arachnid) await you. Bring your friends and show them the splendor of the gardens!

Sincerely,

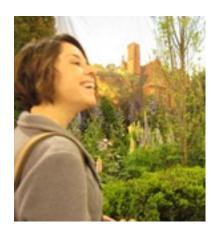
Sarah Bolivar

The McLean Contributionship Endowed Education Intern



Paul Meyer, The F. Otto Haas Executive Director, and the interns explored the frenzy that was the day before the 2013 Flower Show Opening! We met with amazing designers and, afterward, had a grand vegetarian feast in Chinatown.







Above: Stephanie poses to provide an accurate scale of The Green Dragon Pub.





Below: We ran into Drew Becher, President of PHS, who kindly chatted with us about the different Flower Show initiatives, such as reduced plant waste.



notes from the guides chair

Hi All!

How many times have we all taught the following lesson? When it rains, water soaks into the ground. It is taken up by the roots of trees and is pulled through the xylem to the top of the tree by negative pressure. This is because water is lost through the process of transpiration in leaves when the sun shines and the stomata open. This produces a continual flow of water from roots to trunk to leaves to the atmosphere. Well, that does happen but there is one problem with this being a complete answer. The strongest vacuum pump can only pull water up about 34 feet. The reason for this is because at 34 feet, the negative vacuum pressure of the pump just equals the positive downward pressure of the atmosphere. When push and pull are equal, movement stops. So how does a Redwood haul water up 379 feet, the height of the tallest known Redwood? The answer is in a strange property of water which is called cohesion. A water molecule is polar. Its oxygen has a negative charge and the two hydrogen atoms have positive charges. When a large number of water molecules find themselves together, their opposite poles attract and form Hydrogen binds. A single Hydrogen bond is weak but a lot of them together produce a very strong force. The column of water in the xylem has the same tensile strength as a solid steel wire. Atmospheric pressure is nowhere near enough to stop this column of water from going up higher than 34 feet. Add to this the adhesive attraction of water to the walls of the xylem and you have a force to be reckoned with, a force that can get water to the top of a Redwood. So, unlike animals that need an actual pump to push blood around, plants merely use a wonderful property of water and the energy of the sun to keep liquid moving around in their bodies.

(Horticulture, March/April 2013)

See You in the Garden!

Marcia Steinberg, Chair of the Guides



April 2013

events and lectures



Saturdays, April 13 and 20 11:00am - 3:00pm

Japanese Cherry Blossom Festival

Experience the beauty and culture of cherry blossoms! This festival is held two Saturdays in April, both days will feature traditional Japanese cultural activities

Saturday, April 27, 11:00am - 3:00pm

Arbor Day Family Day

This program, open to all visitors, also gives 4th and 5th grade Girl Scouts the opportunity to earn their "Gardener" badge. At different stations throughout the Arboretum visitors will learn about surprising gardens, hardy plants for our area, and will create a seed experiment to take home.

On Display April 1 - August 31

David Rogers' BIG BUGS Exhibit

Visitors to Morris Arboretum may think nature is playing an April Fool's joke on them as Big Bugs spring to life all over the Arboretum's 92-acre garden. These amazing 'bugs' are the creation of Long Island sculptor, David Rogers. Made mostly from found materials, primarily trees and plants that have fallen and died, each Big Bug is a unique creation with its own whimsical character.

The 11 Big Bugs on display will be:

3 Big Ants, 1 Praying Mantis, 1 Dragon Fly, 1 Damsel Fly, 1 Spider with web, 1 Assassin Bug, 1 XL Lady Bug, 1 Grasshopper, and 1 Daddy Long-Legs

The Big Bugs by David Rogers exhibit it made possible by the Madeleine K. Butcher Endowment.



around the arboretum

continuing education opportunities

Thursday, April 18 | 9am - 4pm

Riverfront Landscapes on the Delaware

Horticulturist and garden writer Nicole Juday will lead this tour, which stops at two historic riverfront estates on the Delaware, dating from the Golden Age of Philadelphia horticulture. (Volunteer Price: \$72)

Saturday, April 20 | 10am - 1pm

Planting for the Long Term: Talk and Garden Visit

Meet at Morris Arboretum for Part 1, an informal hourlong illustrated talk; then carpool Michael Martin Mills' Mount Airy garden to see an abundant collection of woodies (including more than 100 rhododendrons).

(Volunteer Price: \$20)

Saturday, April 27 | 10am - 12noon

Rain Gardens: Sustainable Solutions

Rain gardens are an excellent way to absorb rainwater runoff. Louise Clark will teach how to add rain gardens to the landscape where they will be effective.

(Volunteer Price: \$12.50)

To learn more and to register for these great opportunities, call (215) 247-5777, ext. 125.



Images: Arboretum Staff

gardening with history: planning & practice

Thursday, May 30 | 8:30am - 5pm

The Philadelphia region leads the nation in garden heritage sites. How do our historic landscape stewards sustain both garden and mission in the 21st century? What are best practices and opportunities? This conference explores how we govern, interpret, curate and plan. Keynote speaker Peter Hatch, former Director of Gardens and Grounds at Monticello brings a wealth of insight. Charles Birnbaum, Director of the Cultural Landscape Foundation shares regional models for collaborative marketing. Laura Otten, the director of the Non-Profit Center at LaSalle University, examines advisory board development. Local historic garden directors address adaptive reuse, gardening with a mission, interpretation and sustaining our gardens' relevance to the community. Participants enjoy connection and information sharing among historic garden leaders, practitioners and enthusiasts. (Volunteer Price: \$48)

education

don't forget . . .

Arbor Week Volunteers Needed

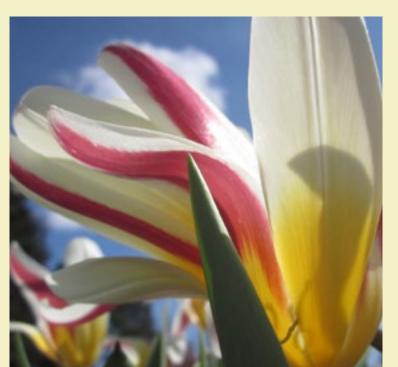
Share your love for trees with children during the Arbor Week Program. The Arboretum will host

two sessions each day. Volunteers are needed for tours, seedling planting, a roots exhibit, and Tree Trivia game show. Please sign up!

Arbor Week Schedule

Monday, April 22th - Friday, April 26th

10:00-11:15am and 11:30am-12:45pm



Please contact Lisa at (215) 247-5777 ext. 157 or e-mail baileyL@upenn.edu to sign up for Arbor Week, the volunteer trip, or spring guiding.

Twilight & Peonies Plant Exchange - House or Garden

For this year's Education Volunteer Recognition Dinner, May 29 6-8pm, in addition to bringing food,

we're inviting volunteers to bring a favorite plant from your garden to share. If you wish to participate, please pot up a plant, write up its cultural requirements and bloom time, put it on the back wall of the tent when you arrive, and at the end of the night, take home another plant of your choice. Bob Gutowski has also agreed to bring in irises he's divided!

Volunteer Trip

Take a tour of Eastern State Penitentiary on Tuesday, April 9, at 10am! Explore Eastern State's incredible architecture, hear true escape stories, and even bear witness to Al Capone's cell (if you dare). We depart from the Kiosk at 9am. After the tour, we will have lunch in a nearby restaurant. (Free for volunteers)

Spring Guiding Sign Ups

You should have received the spring guiding form in your mailbox. Please fill out the form with your guiding preferences and send it by snail mail or email to Lisa Bailey (baileyL@upenn.edu). Please contact Lisa at (215) 247-5777 ext. 157 if you have any questions.

education

discovery series: fun with bugs!







Education is looking for Discovery Series Volunteers to engage with families for hands-on fun. We need four volunteers to take on (2) two hour shifts on the first Saturday of every month beginning in April and ending in October. Please sign up on the education Google calendar, or call Tiffany Stahl at (215) 247-5557 ext. 127 with a specific date that works for you. All activities will be set up on Out on a *Limb* from 11am to 3pm.

Saturday, April 6, 2012

Spiders, Bugs and Beetles, Oh My!

Spiders, true bugs, and beetles may be all classified as arthropods, but are they all the same? Are true bugs and beetles the same? Come to the Discovery table and learn about the similarities and differences between many of the minibeasts that roam the planet. Visitors can also make their own lady bird beetle or spider to take home!

Saturday, May 4, 2013

Marvelous Metamorphosis

Visit the Discovery table and learn about how insects grow from nymph to an adult! We will explore the fascinating lifecycles of a variety of insects from lady bird beetles to butterflies. Budding entomologists will also have the opportunity to create a butterfly craft to take home, too!

Saturday, June 1, 2013

Pollination Station

Using insect models, Discovery table explorers will learn about how pollination happens, and why pollination is so important to the natural world. Kids will put the story of pollination in order using six illustrations, as they trace the honeybee's journey from flower to flower.

education

walkie-talkies: easy as 1, 2, 3

We have walkie-talkies and we need to use them!

For safety sake, you will be issued a charged walkie-talkie before each tour. Weekend guides especially should use walkie-talkies - Very Few Staff Are in the Garden on Weekends.

Weekend Guides take walkie-talkies from the chargers on the floor of the glass-front bookcase. When returning them to the bookcase, they should be turned off and facing forward while in their chargers.

They don't need to be turned on while you're on a tour, but you need to know how to use them:

- 1. Turn the right-side knob until it clicks and you hear a beep it's on!
- 2. To call: the left-side knob (beside the antenna) will be on Channel 1. With the Walkie in your palm, press the large plate on the left side (nothing presses in on the right side) and speak. Practice with someone at Reception if you wish.

In case of a medical emergency, e.g. bee stings, injury, heat exhaustion:

- 1. Call the Reception Desk at Widener. Make sure your walkie-talkie is set to Channel One or use the Call Boxes located above the Garden Railway site or at the Log Cabin. The call boxes contact the Widener Center Reception staff.
- 2. Report the nature of the emergency and be specific about its location. Talk to the victim but don't move them. Assure them that help is on the way. Make sure that you and all those in your group or any others are not in danger. Wait until a staff person arrives.
- 3. After your tour, report to the Reception Desk to help complete an Incident Report.

- Liza Hawley, Visitor Education Coordinator

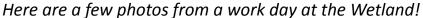
horticulture news

march madness: weeds vs. natives

Our first horticulture volunteer workday for 2013 dawned as a clear and comfortable Wednesday, with Vince's cheery voice on the hotline saying that on the same day, in 1594, Cortez met an untimely fate with the Incas and that we would be working in the parking lot.

About twenty stalwart volunteers were dispatched to weed and prune the beds surrounding the parking lot. By break time, the Vitex had been subdued, most of the weeds were gone, and we enjoyed coffee and conversation with old friends and Kelly, a new volunteer. After break, we spread the remainder of one truckload of mulch at 11:30am. Vince then proceeded to announce he would dump the next truckload of mulch, which was not met with much enthusiasm. We must be slipping but we will get back in shape in the next few weeks. Vince was last seen driving a full load of mulch back to the farm.

- Larry Godley, Volunteer Liaison









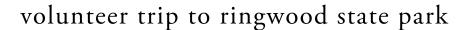


volunteer news

2013 plant sale

Thursday, May 9 - Saturday, May 11

Have fun and earn a 20% discount coupon. Volunteers are needed from Tuesday through Saturday to help with set-up and the sale. Signing up has gone on-line this year. Follow this link bit.ly/volunteerPS and select the dates and times that work for you. Questions? Contact Michelle Conners at mconners@upenn.edu or 215-247-5777 ext. 109.



Thursday, May 16 | 8am - 6:15pm

Join us to visit two historical properties in Ringwood State Park in upstate New Jersey this spring. Located in the "heart of the highlands," Ringwood is surrounded by the Ramapo Mountains. Upon arrival in our deluxe motor coach, we will first visit Skylands, the New Jersey State Botanical Garden (http://www.njbg.org/). This 96 acre garden also includes a 1920's Tudor revival manor house. We will receive tours of both house and gardens. Lunch will be at Arta Restaurant (http://artarestaurant.net), a mere three miles down the road where our meal will consist of a salad, a choice of three entrees (including a vegetarian option), dessert and coffee or tea. After lunch we'll travel to another property in the park, Ringwood Manor (http://www.ringwoodmanor.com), for a tour of the grounds which contain historical architectural elements, as well as a history of being sacred grounds for the Lenni Lenape. Then we'll all gratefully climb back on the bus for a glass of wine to accompany our trip back home. Victoria Sicks, Miriam von Essen, and Michelle Conners will be your hostesses for this trip.

Cost: \$67.00 (includes bus, driver gratuity, tours and lunch) Please contact Michelle at mconners@upenn.edu or 215-247-5777 ext. 109 to sign up.







volunteer news

volunteers needed!

Facilities Tasks

Volunteers are spread throughout the Arboretum, guiding visitors, working in the garden, staffing the gift shop, restoring the grist mill, running the trains, and archiving historic materials.

Tom Wilson would like some help, too. He is the new Director of Physical Facilities, charged with maintaining buildings, fencing, fountains, exhibits, machinery and the like. To accomplish this large, never-ending task, his small staff could certainly use some help - no heavy lifting or expert knowledge is required for many jobs.

At the second volunteer workshop in February, Tom listed some tasks ranging from the expected (helping paint interior walls) to the unexpected (skimming leaves from intake sites at the fountains to keep the water flowing and the pumps from burning out). He also would like a mechanic helper with a tradesman background or someone who is mechanically inclined. But even having volunteers to help with general cleanup or simply hold a ladder and hand tools to someone doing carpentry work would be a big help, he said. You can contact Tom and learn more at wilsonth@upenn.edu or at 215-247-5777 ext. 108.

- Herb Kestenbaum, Volunteer Liaison

Arbor Day Family Program on April 27

As well as being open to all visitors, this year's program will help 4th & 5th grade Girl Scouts earn their "Gardener" badge. We have an ambitious day scheduled and need many hands to help it work!

Visitor Center - 1 volunteer needed to greet Scouts and other visitors, hand out materials and direct them toward activities

Orange Balustrade, Pennock Garden, Rock Wall & Fernery - two volunteers are needed at each of these stations to point out the special features that make these gardens work. Talking points will be provided.

Fernery Plaza - two volunteers needed - one to discuss plant hardiness using a large plant hardiness map; one to help visitors pot up birch tree seedlings.

Children's Eating Area - two volunteers needed to help visitors prepare a take home seed experiment.

If you can help, please contact Michelle Conners at mconners@upenn.edu or at 215-247-5777 ext. 109.

volunteer news

volunteers needed!



Staff helped install the bugs on a cold, snowy day!



Former intern, Joshua Darfler, was last seen fraternizing with the large praying mantis.

Seeking Volunteers for Creating Canopy Tree Giveaway

The University of Pennsylvania and Morris Arboretum are partnering with Philadelphia Parks and Recreation for the third annual Creating Canopy tree giveaway. 125 trees will be given away in 5- and 7-gallon containers on a first-come, firstserved basis to interested Penn staff and faculty who pre-register.

We are looking for about six volunteers to perform various functions such as helping folks choose their tree species, greet and register participants, help load trees into cars, etc.

When: Thursday, May 16th and Tuesday May 21st from 3-6pm

Where: Penn Park's parking lot at 31st and Walnut Street.

Please contact Jason Lubar at lubar@ upenn.edu, 215.247.5777 ext. 189 if you would like to help. Thanks!

for fun

the gardener's recipe box

As we look forward to the budding of trees and the return of color to the garden, we could use a little green in our lives. This recipe will jumpstart your spring by adding color and zing to your meals. Use as a marinade for your favorite protein or enjoy as a dressing.

Green Sauce

1 cup flat leaf Italian parsley

½ cup fresh basil

1 medium garlic clove

1 tablespoon drained capers

3 cornichons

1 celery rib, cut up

½ cup extra virgin olive oil

1 tablespoon red wine vinegar

1-2 tablespoons fresh lemon juice

2-4 tablespoons chicken stock or water (optional)

Salt and freshly ground pepper to taste



- 1. In a food processor, combine first 8 ingredients. Chop, but do not puree.
- 2. Stir in lemon juice to taste.
- If sauce is too thick, add a few tablespoons of stock or water
- Season with salt and pepper

From a long lost issue of The Best of Food and Wine. enjoy!



- Lucy Dinsmore, Rose Garden Horticulturist

Send us your recipe and provide a little plant-related information to Sarah at sbolivar@upenn.edu!

upcoming events

April

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
	1	Rose and Flower Garden Intern Project Presentation	Hort. Volunteer Work Party (Lucy)	Flora of PA Intern Project Presentation Philadelphia Rose Society Meeting 7:30 - 9:30pm	5	Garden Discovery Series 11am - 3pm Big Bugs Grand Opening 11am - 2pm		
7	8	Volunteer Trip 10am (Meet at 9am Meadow by Kiosk)	10 Hort. Volunteer Work Party (Iana)	11	12	Japanese Cherry Blossom Festival		
14	15	16	17 Hort. Volunteer Work Party (Vince)	18	19	Japanese Cherry Blossom Festival		
21	Bugs a-Brewing (Off-site Event at Iron Hill Brewery) 6:30 - 8pm	23	24 Hort. Volunteer Work Party (Tracy)	25	26	27 Arbor Day Family Day 11am - 3pm		
20	ARBOR WEEK							
28	29	Education Committee Meeting 1:30 - 3pm McLean Room						

Weekly Volunteer Events

Saturdays and Sundays: Regular Tour 2 - 3pm

Sundays: Great Trees Tour 1pm

First and Third Saturdays: Native Trees Tour 11am - 12pm Second Saturday of the month: Mill Volunteer Workdays 10am

upcoming events

May

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Hort. Volunteer Work Party (Louise)	2	3	4
5	6	7 Guides Council Meeting 1:30 - 3:00pm McLean Room	8	9	10	11
Alla					PLANT SALE	
12	13	14	15 Hort. Volunteer Work Party (Iana)	Ringwood State Park Volunteer Trip 8:00am-6:15pm (Meadow by Kiosk)	17	18
19	20	21	Hort. Volunteer Work Party (Kate)	23	24	Garden Railway Summer Grand Opening 1 - 3pm
26	27 Memorial Day (Offices Closed)	Education Committee Meeting 1:30 - 3pm McLean Room	29 Hort. Volunteer Work Party (Lucy) Twilight and Peonies 6 - 8pm	30	31	

Weekly Volunteer Events

Saturdays and Sundays: Regular Tour 2 - 3pm First and Third Saturdays: Native Trees Tour 11am - 12pm

Second Saturday of the month: Mill Volunteer Workdays 10am