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: Rosa ‘Sea Foam’
Photos throughout: Sarah Bolivar unless otherwise stated
Letter from the Editor
September 2012

It’s hard to believe that fall will soon be upon us and leaves are already teasing us with their deep red tinge or ochre hue. Though time seems to fly, be sure to check out some fun events this month, like the scarecrow design contest, fall classes for children and adults alike, as well as the Sunshine and Roses event to honor all Arboretum volunteers. Enjoy the nascent autumn foliage and upcoming events!

Sincerely,

Sarah Bolivar

The McLean Contributionship
Endowed Education Intern

Check out images from the interns’ tree climbing session!

Arborists Andrew Hawkes and Dan Weitoish, along with Arboriculture Intern, Fabrice Rochelemagne, show the interns how to safely set a climbing line in a tree, tie in using the traditional climbing system with a blake’s hitch, and how to hip thrust, which is a technique used to ascend the line. Everyone had a great time seeing the ground from such a different perspective!

Background Image: Uptownupdate.com
Hi All!

September is finally here, bringing with it shorter days, cooler nights, a hint of color in the leaves of the dogwoods, and . . . ragweed season. Allergy sufferers – I am one of them – beware. Your problems are about to get bigger. The research of scientist Lewis Ziska, published in National Wildlife (August/September, 2012), shows that rising carbon dioxide levels due to global warming are increasing local temperatures and extending the growing season for ragweed in parts of North America. This is not good news for hay fever sufferers as ragweed is responsible for 90% of the pollen-related sniffles in this country. Ziska first studied the growth of ragweed in urban and rural areas. Cities trap more heat than rural areas and have higher concentrations of carbon dioxide. Consequently, Ziska found that city ragweed grew faster, flowered earlier and produced more pollen than rural ragweed.

Our earth is not warming evenly. Rather, it is warming more at the poles than at the equator. If ragweed is responding to carbon dioxide levels and warmer temperatures, this response should show up as a function of latitude. Ziska’s team studied plants at ten North American locations on a north-south line going from Austin, Texas, to Saskatoon, Saskatchewan. He gathered data on pollen counts and weather records for a 15-year period. The results were startling. During this time period, Oklahoma City had only a one day increase in its ragweed season, but La Crosse, Wisconsin’s season was extended by 13 days. Ragweed in Fargo, North Dakota, sheds pollen 16 days longer and in Saskatoon, the farthest north, the pollen season was one month longer. Ziska’s records showed definite extensions in the ragweed season with greater increases the farther north his team looked. So we sufferers had better stock up on Kleenex because the pollen count is bad and getting worse. And after all that, I wouldn’t dare tell you what is going to happen to poison ivy!

See You in the Garden!

Marcia Steinberg,
Chair of the Guides
Volunteer Trip Botanizing

Thursday, September 13

7:30am to 5pm, $40

Volunteers are invited to join botanists Dr. Ann Rhoads and Dr. Tim Block on a trip to Island Beach State Park and Rare Find Nursery. Discover more than 400 species of plants and perhaps catch a glimpse of the state’s largest osprey colony along this barrier island ecosystem.

On the way home, we’ll visit Rare Find Nursery in Jackson, New Jersey. Long known as a specialty purveyor of rhododendrons and azaleas, Rare Find also carries a large selection of woody plants and perennials not usually sold in retail garden centers. Please bring your lunch and something to drink. Snacks will be provided. Contact Michelle Conners at mconners@upenn.edu or (215) 247-5777 ext. 109 to sign up for this adventure!
A Mini Morris Rendition

Remember yesteryear? Remember “The Lone Ranger”? Remember the fun of dressing up and pretending? I can proudly say I was able to do all of these things this summer. On many hot sultry Thursday evenings, I rode off into the sunset at 8:00pm from the hills at Compton. My fantasy started in early June when Irv Leventhal and I assumed the roles of John and Lydia at the annual Moonlight and Roses gala. I resumed my role as Lydia, but this time for children ages 5 to 10, who signed up for improv theatre with the Mini Morris Players. While I was quite hot in my Victorian garb, I had lots of fun each week assuming characters as needed. I was a swan, weeping willow, rose, and even a duck. Depending on the number of children who came each Thursday, my brother, “John”, directed me to become an animal or a tree.

The action started at 6:30pm when the adults dropped off their budding actors and had an hour to stroll around the Arboretum. Parents would then see the production come alive at 7:30pm. In the meantime, the children were told of each week’s scenario and then we practiced our roles. The kids donned various colored pinnifores and made head bands to represent their roles. Often the children had ideas that were not in the script, but were still incorporated into the skit. Some of the suggestions were downright brilliant! At the end of the 3-minute performance, everyone took a deep bow and the parents applauded loudly. Many of these thespians came every week and bonded nicely, as did the parents. I was unable to be “Lydia” all 10 weeks, so Bette Goldstone and Joan Kober were also part of this new delightful summer program. I suggest everyone dress up and pretend. Feel young and carefree again. It could be your “aha” moment.

-Mary Pat Boyle, Morris Arboretum Volunteer
around the arboretum

参道狛犬  Komainu

Komainu guarded the Japanese Overlook Garden a century ago.

Komainu have returned to the Japanese Overlook Garden in the English Park, restoring an important sense of place and visual reference points in the core of this very special garden.

How did they get there and where had they been?

This story could begin about 2,500 years ago in India and follow the path of Buddhism and its variants through time and across China, through Korea and into Japan. In 1912, John Morris purchased a pair of “Shrine Dogs” from the Boston office of Yamanaka & Co., an antiques dealer based in Japan with international distribution. The pair came from a Japanese temple in Nara and date to about 1700. John Morris noted “They are certainly very rare in design and condition.” With the guidance of consulting Japanese landscape designer, Y. Muto, and Compton Head Gardener, Frank Gould, the komainu were placed in the Japanese Overlook Garden as a part of the original design. During the Second World War, many of the Asian garden ornaments were removed from the garden. While several lanterns and other features have disappeared, the komainu were eventually relocated to the Bloomfield Barn. Their condition was such that a return to the garden setting was not possible.
In 2012, replicas of the originals were cast by Campania International, Inc. The restoration of the entire Japanese Overlook Garden is made in memory of Veronica Megna James by her husband, Norman, and daughter, Christine, a member of the Advisory Board of Managers and Co-Chair of the Directors’ Guild. The recreation and installation of the komainu in the garden is a key component of this ongoing restoration project. Horticulture Section Leader for the English Park, Kate Deregibus, oversaw the recent installation with staff and stonemasons from Joseph Manero & Sons. The original komainu are now on display in the Horticulture Center at Bloomfield Farm. Horticulture and Facilities staff lifted them into place using teamwork, muscle, ingenuity, and a mobile hydraulic jack.

Komainu is a Japanese term often literally translated as “Korean-dog” in reference to its origin. Komainu are typically pairs of shrine guardians set along the entrance to the temple to ward off evil spirits. They have become iconic figures in Japan. They are distinguished from each other by the open and closed mouths. One often has a horn on its head. Gender is not so clearly distinguished as in their Chinese antecedent, the Foo-lions or dogs. In the 9th century, the open mouth figure was referred to as shishi (lion) and the closed mouth figure as komainu (Korean-dog). Over time, the pair was referred to collectively and individually as komainu. The open and closed mouths reference the a-un posture or sound, the “alpha” and “omega” from Sanskrit. If you haven’t been to the Japanese Overlook Garden recently, it may be time for your return.

-Bob Gutowski, Director of Public Programs
around the arboretum

The International Society of Arboriculture Conference: Great Speakers + Three Days + the Fattest Trees We Have Ever Seen

*Balmy weather and mighty Douglas fir stands welcomed Rebekah Armstrong, The Martha S. Miller Urban Forestry Intern, and Fabrice Rochelemagne, The Walter W. Root Arboriculture Intern, to the International Society of Arboriculture Conference in Portland, Oregon, where arboriculture professionals gathered to discuss the latest research and trends from around the globe.*

Well, actually, the International Society of Arboriculture (ISA) Conference was five days if you count the annual International Tree Climbing Championship (ITCC) that took place over the weekend. Contestants hailed from as far as New Zealand, China, and Sweden. Climbers competed in various events: head-to-head footlock and work climb, to name a couple. Head-to-head footlock is essentially a sprint race—two climbers on two lines climb up 40 feet as fast as possible using a technique called footlocking, the technique that many arborists regularly use to ascend into the canopy. The work climb, on the other hand, simulates a job that requires advanced canopy traversing techniques like limb walking to complete. Each work climb contestant has to gently, but swiftly, advance to the tip of a limb about twenty feet long, but only an inch or two in width, without upsetting the buzzer, which is a device rigged to buzz loudly if the branch is jostled too wildly. Seeing master climbers was like watching any expert athlete compete: actions are measured, efficient, and fluid. But, just like any sport, you have to understand what the athletes are actually doing to get into it! Climbers at the Arboretum have been inspired and will be adapting these competitive techniques for their own work.

Following the ITCC, the ISA conference opened Monday morning with keynote speaker Peter Raven, a botanist and environmentalist, professor, and President Emeritus of the Missouri Botanical Garden. Peter Raven is awesome, and an engaging presenter. In his talk, “Saving Trees, Saving Ourselves,” he covered the implications of climate change for plant communities, and their impact
on human communities. For example, in medicine you find an anticoagulant called Warfarin, which is taken to prevent blood clot formation. This anticoagulant was originally noticed at work in cows that had eaten spoiled sweet clover in the 1920s. Also, take a look at beer. Wild yeast, which can give a unique taste to beer, bread, and wine, overwinters in the guts of wasps like *Vespa crabro* and *Polistes spp.* and wasps need trees – for nest sites and for food like sap, plant juices, or even the honeydew produced from aphid infestations. By providing cool examples, Peter Raven encouraged us to see that by conserving or replanting trees, we help preserve the conditions other species need, species that we might find out we ourselves need later on.

In his talk about sustainable urban forestry, arborist Gordon Mann noted that when you calculate the benefits urban trees provide, they become more than just aesthetic expendable things. Trees are infrastructure and, unlike most other types of infrastructure, they actually *appreciate* in value as they age. As their canopies broaden and heighten, they provide more shade; with more leaves, they photosynthesize more, taking CO₂ out and putting O₂ into the atmosphere; as a tree ages, its character and beauty deepen. But, taking care of urban trees can be difficult, especially when 95% of total soil compaction can occur after the first 5-10 times someone walks over a tree’s roots, not after years of foot traffic, as many believe. Fortunately, implementing city tree inventories, tree steward programs, and new techniques, like retrenchment pruning, can help increase the number and lifespan of our urban trees.

Many of the latter presenters offered more detailed information about tree planting and tree care. Ed Gilman, an environmental horticulture professor at the University of Florida, detailed the best nursery practices for producing good roots. An ideal root system for anchorage has straight roots coming out perpendicular to the plant, with some near the surface. Many trees grown in the standard nursery pots end up with a mass of roots growing downward and clustering at the bottom of the pot. When roots hit the sides of the pot they start growing downward, and once they start diving downward it’s hard to reverse them. So how do you get straight roots near the surface in a nursery? When a plant is moved to a larger pot, prune any diving roots, making sure to cut far enough back to remove the bend. And go for wider pots over deeper ones to encourage roots to spread out radially.
around the arboretum

When Gilman tested root anchorage (with a 75mph wind cannon!), the trees whose downward roots had been pruned leaned significantly less than those that had a mass of downward-growing roots.

These are a few of the 30+ lectures and demonstrations we saw during the conference. We’re excited to be able to use what we learned around the Arboretum grounds. If you see us, feel free to ask what else we found out about – we can tell you about urban freeway forestry efforts in Houston, how to calculate the critical root zone of a tree, when a tree decides to drop a leaf, and why the Quercus macrocarpa on the Bill and Melinda Gates Foundation campus was 100 degrees on a 60-degree day.

-Rebekah Armstrong,
The Martha S. Miller Urban Forestry Intern

-Fabrice Rochelemagne,
The Walter W. Root Arboriculture Intern

Support from the Bartlett Tree Foundation helped make this experience possible.
Curators from the past four decades will share insights into the development and management of the plant collection over the years, illuminating the greatest challenges they faced, their accomplishments and the lasting impact of their work.

Please Join Us
Thursday, September 27, 2012
4:00 - 5:30pm - Panel Discussion
5:30 - 7:30pm - Reception on Out on a Limb

Featured curators will include:

Gary Koller | 1973 - 1976
Anthony Aiello | 1999 - present

This is an exclusive opportunity to register early. Space is limited.

Registration fee:
Volunteers: $12.50
Members $25.00
Non-members $30.00

To register, please call the Education Department at:
215-247-5777 x125
Volunteers, invite your friends, children or grandchildren to participate in Morris Arboretum’s fifth annual Scarecrow Design Contest! Along with designer scarecrows, participants are invited to create fantastical storybook-themed characters.

More than 30 scarecrows will be on display at the Arboretum for 3 weeks along Scarecrow Walk at the Oak Allée from Saturday, October 6 through Sunday, October 21. Visitors of all ages will vote for their favorite scarecrow in both categories (Designer and Storybook theme) and determine the prize winners. Entry fee for the contest is $30 and scarecrow frames and hay are provided. Details and downloadable contest entry forms are available online at www.morrisarboretum.org. For more information, please contact Susan Crane at (215) 247-5777 ext. 121.

Have fun designing!
around the arboretum

Upcoming Volunteering Opportunities

**Fall Festival**
Sunday, October 7
Volunteers are needed to help out at the scarecrow building and pumpkin painting tables. Shifts run 9:30am-12:30pm or 12:30-3:30pm. Please contact Michelle Conners at mconners@upenn.edu or (215) 247-5777 ext. 109 if you can help.

**Walk for Wishes** is a fundraising and awareness event taking place at the Morris Arboretum October 14, 2012. The event will allow the community to become involved in helping make children’s wishes come true. Please join us for a day of exercise, fun, and support for children with life threatening medical conditions. For more information please visit www.walkforwishespa.org or email walk@philadelphia.wish.org
around the arboretum

Volunteer Snapshots
Reminder - Guide Refresher Sessions

Have you always wanted to expand your tour repertoire and brush up on your guiding techniques? Or have you never led a tour, but would love to do so? If the answer to either of these questions is “YES”, our Fall Refresher Sessions scheduled for September 14th and 21st are just the thing for you! Both experienced and relatively new guides are strongly encouraged to attend. Each session will feature two entire tours demonstrated by experienced guides plus stimulating workshops led by Bob Gutowski and Tim Block.

Since we are frequently called on to lead a wide variety of tours, the need for additional guides to lead these tours has become crucial. So please don’t miss the Fall Refresher Sessions. We know that you will find them both enjoyable and stimulating. Here are the details for the two sessions:

**Friday, September 14th (10:00am – 2:30pm)**

10:00 – 11:30: Wetlands Tour led by Willie Wilson followed by a brief question and answer session. (NOTE: Please park in the meadow and meet the group there.)

11:30 – 12:30: Tim Block will speak to the group about the latest research in botany and answer your burning questions about plant reproduction.

12:30 – 1:00: Lunch: Please bring your lunch – drinks and dessert will be provided.

1:00 – 2:30: Plant Reproduction: Seed Formation (Pollination Tour) and Seed Dispersal Tour led by Marcia Steinberg followed by a brief question and answer session.

**Friday, September 21st (10:00am – 2:30pm)**

10:00 – 11:00: Bob Gutowski will speak to the group about the latest work done on the Mill and remind us how everything works. (NOTE: Please park at Bloomfield Farm. We’ll walk to the Mill from the parking lot.)

11:00 – 12:30: Children’s Mill Tour led by Jane Alavi followed by a brief question and answer session.

12:30 – 1:00: Lunch: Please bring your lunch – drinks and dessert will be provided.

1:00 – 2:30: Horticultural Center Tour led by Joan Hanby followed by a brief question and answer session.

-Joan Kober, Chair Retention Committee
garden highlights

Pennisetum alopecuroides
fountain grass
(Herb Garden)

Tricyrtis dilata
toad lily
(Around Widener Visitor Center)

Zinnia angustifolia
‘crystal white’
(Garden Railway Entrance)

Lantana camara
lemonade lantana
(Garden Railway Entrance)

Lagerstroemia
‘Tuskegee’
(Oak Allée )

Kalanchoe thyrsiflora
 flapjack
(Garden Railway Entrance)
# upcoming events

## September

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**Weekly Volunteer Events**

- **Wednesdays**: Horticulture Volunteers 8:00am-12:pm
- **Saturdays and Sundays**: Welcome Cart 11:00am-3:00pm
- **Saturdays and Sundays**: Regular Tour 2:00pm-3:00pm
upcoming events

October

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