

SEASONS

Summer 2015

Volume 44 Number 2



Morris Arboretum
UNIVERSITY of PENNSYLVANIA

Official arboretum of the Commonwealth of Pennsylvania

A Note from the Executive Director

PAUL W. MEYER, *The F. Otto Haas Executive Director*

Flora of Pennsylvania: Taking Plant Science Research to the Next Level

Botanical and horticultural research were central to the vision of John and Lydia Morris as they planned the future of the institution we now know as the Morris Arboretum of the University of Pennsylvania. And, since 1933, Arboretum staff and students have focused on developing information and expertise on the native and naturalized plants of Pennsylvania. This work has resulted in a series of definitive publications including two editions of *Plants of Pennsylvania*, *Trees of Pennsylvania*, and most recently, *Aquatic Plants of Pennsylvania*.

In 1980, the Arboretum assumed leadership in developing an electronic database for the Pennsylvania flora, and since then it has continued to build and expand the wealth of information included. Today, this database covers more than 3,000 taxa of plants and includes more than 400,000 records of plant occurrences, each based on a physical herbarium specimen. Information derived from the database informs teachers, students, landscape professionals, and natural lands managers, as well as amateur plant enthusiasts. Each year the database is augmented with new information resulting from extensive field work conducted throughout the Commonwealth.

As an outcome of strategic planning, this work will continue, and the Morris Arboretum will build its expertise on Pennsylvania plants and develop recommendations for their protection and conservation. However, while science has moved forward, we currently do not have the laboratory equipment and supplies needed to conduct the tests and experiments which will answer critical questions related to understanding Pennsylvania plants, especially those which are rare, threatened or endangered. For example, through recent field work, Arboretum botanists have reviewed the occurrences of a *Carex polymorpha* (variable sedge). A substantial stand of this rare species was found growing in a state park. However, as this species often reproduces asexually, it is possible that most of this stand is clonal, and hence represents very little genetic diversity. Without further laboratory work, we cannot be sure of the depth of the genetic reservoir in this population. Additional laboratory studies would yield the information needed to assess this population and the genetic diversity it represents, and would allow us to make sound, data-based recommendations for the preservation of this species.

This is just one example of a rare plant of which additional laboratory studies are needed. But, of course, a fully equipped lab will not only advance plant conservation, it will also provide facilities for our staff, interns, and students to build the laboratory skills that are needed for the practice of botany in the 21st century.

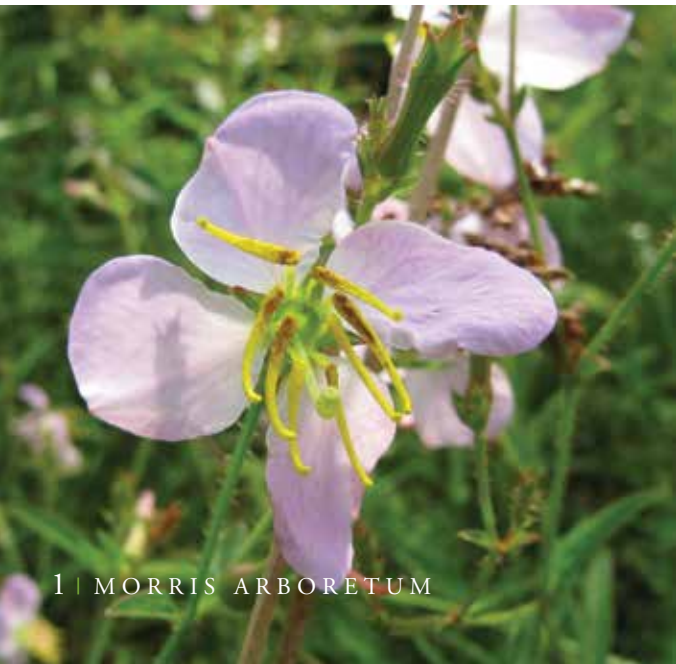
I am delighted to announce that the Arboretum has received an anonymous, \$100,000 challenge grant to support the goal of equipping our plant sciences laboratory. All gifts supporting the laboratory which are pledged before December 31st will be matched one to one, up to \$100,000. Already, more than \$40,000 in new gifts have been committed towards the project.

We are very proud of the Arboretum's long and productive history in the plant sciences, and look forward to integrating state-of-the-art scientific laboratory methods into our program so that we can continue to be the science-based leader in Pennsylvania's plant conservation and botanical education.

Paul



Photo: Nick Kelsch



SEASONS

Morris Arboretum of the University of Pennsylvania

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Christine Pape, Editor

The Morris Arboretum of the University of Pennsylvania is an educational institution that promotes an understanding of the important relationships between plants, people and place. The Arboretum conducts three major activities – horticultural display, public and professional education, and botanical and horticultural research.

Public Garden Hours:

Mon-Fri, 10am-4pm

Sat/Sun, 10am-5pm (April - Oct.)

Sat/Sun, 10am-4pm (Nov. - March)

Weds., 10am-8pm (June, July, August)

Information:

(215) 247-5777

www.morrisarboretum.org

<http://www.upenn.edu/paflora>

Guided Tours:

Every Sat/Sun, 2 p.m.

Visitor Entrance:

100 East Northwestern Avenue between
Germantown and Stenton Avenues in the
Chestnut Hill section of Philadelphia

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Arboretum Rentals

Hold your special event in one of Philadelphia's
most beautiful settings. The Widener Center and
surrounding grounds are available for weddings,
parties, and private and corporate meetings up to
170 guests. For details contact the rentals team at
(215) 247-5777, ext. 158.

e-newsletter

Would you like to receive our monthly e-newsletter
and other Arboretum updates via email? It's a
great way for you to stay up-to-date on upcoming
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address the problems of SPAM, many Internet Service
Providers (ISPs) and email systems now block or
filter email that is not from a "safe sender." Please
add info@morrisarboretum.org and members@morrisarboretum.org to your list of accepted senders
or friends list if you wish to receive this information.

Cover Photo: Rob Cardillo

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Photo: Paul Meyer





Photo: Paul Meyer

A PAGE FROM A LAB JOURNAL:

Scientific Research at the Morris Arboretum

CYNTHIA SKEMA, *Botanical Scientist*

By turning sunshine into sugars, plants are the primary producers upon which nearly all life on Earth depends. In particular to our human (and aerobic) point of view, plants not only serve as our primary food source, but also provide us with oxygen, shelter, medicines, and enjoyment, which are reason enough to make it evident that understanding plants is critical to our existence as a species. Thus, plant science research, from the most basic to the most applied, is a fundamentally important task, and one which the Morris Arboretum takes most seriously. For more than 80 years, the Arboretum has fostered a research program that, given the size of the institution, has continuously punched well above its weight. Now it is time for that research program to grow. The past decades have seen plant research at the Arboretum focus on plant exploration and evaluation for ornamentals, and specimen-based research and field work on the plants of Pennsylvania. We will continue to excel in our research in these areas, but now aim to broaden our

research efforts to include the study of plant molecular biology and anatomy.

The study of plant anatomy and morphology, which examines plant forms at the organ and tissue level, can provide insight into how plants function in and respond to their environment, how they evolved, and how they are related. The study of plant molecular biology will allow us to gain access to the wealth of information stored in the genetic code of plants, an endeavour with rich rewards, such as an understanding of how plants are related to one another, or how particular genes are expressed to create particular forms or reactions. Information about the relationship between species helps us better understand the 'big picture' of plant evolution, and further strengthens what we know about the branches in the Tree of Life that pertain to plants. On a finer scale, crop and ornamental breeding programs benefit from knowing the closest relatives of a species of interest. If we look within a species,

a molecular evaluation allows us to survey the genetic diversity of particular individuals or populations of plants – information which is critical to making conservation efforts effective. For example, an understanding of the population genetics of a rare plant species can indicate which individuals are best to propagate for a restoration program or *ex situ* conservation effort. Utilizing modern methods and theory, the study of plant DNA and anatomy provides us with a window into the past and a view of the future of plant evolution.

The growth of our research program requires the addition of some new tools to our toolkit. The John J. Willaman laboratory, on the garden level in Gates Hall, provides adequate space for the current lab needs of the Arboretum's research program, however the facility lacks the modern equipment necessary to study plant molecules and anatomy. Hence, we are currently fundraising to procure the new lab equipment necessary for this program which will allow us to continue to provide current scientific findings to the world. Meeting this goal will further strengthen and grow research, an integral piece of the mission of the Morris Arboretum and a serious component of the "DNA" of the University of Pennsylvania.

As a research university, we are first and foremost a bastion for the pursuit of new knowledge and deeper understanding. We fundamentally value great ideas no matter their marketability, and we embrace creative inquiry regardless of an immediate application. Basic research is absolutely essential to who we are.

– AMY GUTMANN, *Penn Gazette* (Jan./Feb. 2015)

DNA double helix

The John J. Willaman Laboratory: A Fundraising Challenge Issued

Scientific research in botany and horticulture has been one of the pillars of the Morris Arboretum's mission since its inception in 1933. Recognizing this, an anonymous friend of the Arboretum has made an extraordinary offer to support the fundraising efforts for the modernization of the plant research laboratory. This generous individual will match, on a 1:1 basis and up to \$100,000, each gift received in calendar year 2015 that is designated for the purchase of state-of-the-art laboratory equipment for the Arboretum's John J. Willaman Laboratory. If you are interested in participating in this matching gift opportunity, please call or email Mira Zergani, Director of Development, at (215) 247-5777, ext. 102 or mzergani@upenn.edu.

Planned Giving Profile – Paul W. Meyer and Debra L. Rodgers

LESLIE CRANE, *Development Communications Associate*

Debra Rodgers and Paul Meyer, the *F. Otto Haas Executive Director*, have recently announced a generous planned gift to the Morris Arboretum. Having been part of the Arboretum family for nearly four decades, Debbie and Paul decided to make it their most important philanthropic priority when they began establishing their wills years ago. They created an endowment to fund transformational educational opportunities for Arboretum staff members, such as a program that enables horticulture staff members to participate in a work-study program at Windsor Great Park in England.

Debbie and Paul believe in the power of travel and continuing education to enrich people's lives, and have both gained wonderful experiences through educational benefits offered by their employers in the past. In 1991, Debbie completed her MBA at Villanova University with tuition benefits offered by her employer at the time, a step that eventually led her to her current position today as an executive at Aramark. Similarly, Paul, at the 10-year mark in his career, was given the unique opportunity by the Morris Arboretum to embark on a year-long sabbatical at the University of Edinburgh and the Royal Botanic Garden in Scotland. He returned from this "rich and rewarding" experience inspired to bring new life

"The three weeks spent at Windsor's Royal Landscape was an experience of a lifetime. I worked alongside the gardeners of the Savill and Valley Gardens and was immersed in the English history and culture while exploring gardens and museums of the Greater London area."

– TRACY BEERLEY,
The McCausland Natural Areas Horticulturist



Photo: Mark Stehle

to the Arboretum. It is Debbie's and Paul's wish that their endowment will provide similar life-changing experiences for members of the Arboretum staff for years to come.

When looking for the means to make a lasting impact at the Morris Arboretum, Debbie and Paul began researching the resources and tools made available to them through the University of Pennsylvania's gift planning. They discovered that there are a variety of investment vehicles to choose from that offer significant benefits to the Arboretum while providing for their own retirement. They decided on a charitable remainder unitrust (CRUT), which will distribute to them a fixed percentage of the value of its corpus annually. Not only are Debbie and Paul setting a wonderful example of philanthropy for the Arboretum community, they have found a win-win way to do so. In Paul's own words, "This vehicle has allowed us to make a much larger gift to the Arboretum than we would be able to otherwise, because later it will provide a steady stream of income in retirement."

If you would like more information about the many ways to support the Arboretum through a bequest or planned gift, please contact Mira Zergani, Director of Development at mzergani@upenn.edu or (215) 247-5777, ext. 102.

The Bloomfield Barn Restoration Project

LESLIE WEISSER, Associate Director of Development,
Corporate, Foundation and Donor Relations

Morris Arboretum visitors often ask about the significance of the red, double-tier barn located on Bloomfield Farm adjacent to the Horticulture Center. The Bloomfield barn was built in the early 19th century, and is an important example of a traditional Pennsylvania bank barn, a design dating back to the colonial era. The upper level of the barn provided space for the storage of equipment and feed grain; the lower level housed dairy cows and other livestock.

More than a century old, the Arboretum's Bloomfield barn is one of four original buildings located on the farm that are still standing, and also the last of the remaining Arboretum farm structures in need of restoration and preservation. Apart from being repainted and having the roof replaced, the barn has had minimal structural upgrades since the 1930s.

A preliminary assessment of the barn determined that the first step in restoration must be the replacement of the failing cedar shingle roof. While the longevity of a cedar shingle roof depends on many factors – the quality of the product used, the quality of the initial installation, and the severity of the climate – the average life span for a cedar roof is between 20-25 years. Last replaced in 1992, the current roof has deteriorated significantly due to both weather and age.

A larger and more comprehensive structural study of the Bloomfield barn, led by Metcalfe Architecture & Design in collaboration with engineers and a historic preservation firm, is underway. The project team will evaluate what additional conservation steps need to be taken in order to preserve the

Photo: Jessica McAtamney

Photo: Paul Meyer



historic integrity of the barn, while also creatively repurposing part of the building's space for public programming and educational purposes.



Bottom two photos courtesy of Morris Arboretum archives.

During the past five years, a resurgence of interest in local history has led to a substantial increase in requests for tours of the Morris Arboretum's recently restored Springfield Mills. As a result, the Arboretum now welcomes school tours and hundreds of regional and national visitors to the mill each month to learn about the role of agriculture and mills in American history.

The rehabilitation of the Bloomfield barn will offer additional opportunities for public outreach and learning, allowing access to part of the barn for guided tours, expanded educational programming, and special events. Arboretum visitors will learn about Bloomfield Farm's significant contributions to the growth of the region, and will gain a greater understanding of the critical relationship between people, plants and place in southeastern Pennsylvania and in American history.

If you are interested in learning more about this project, please contact the Morris Arboretum's Development Department at (215) 247-5777, ext. 147.





Photos: Paul Meyer

A Waltz in the Woods

CHRISTINE PAPE, *Editor*

This spring, the Morris Arboretum welcomed back stickwork artist Patrick Dougherty. His previous 2009 installation, *The Summer Palace*, was an Arboretum sensation, and his new sculpture, entitled *A Waltz in the Woods*, has been wowing visitors since it opened in April.

In the last thirty years, Dougherty has created more than 260 sculptures in more than 15 countries. Completing 10 pieces a year, Dougherty holds each creation to a strict three-week time schedule. Working at the Arboretum in March, Dougherty

found himself a bit behind schedule due to snowy weather and other factors. Still, he wasn't concerned. "I only worry about things I can control," he said.

A Waltz in the Woods includes seven "towers", each roughly 25 feet high, between which visitors may roam. Open windows create an airy feel, and opposing doors allow for travel between the towers. The variations in shape and size create a unique sense of flow and a maze-like feel. The negative space within the circle of the towers pays homage to where the beloved *Summer Palace* once stood.

To prepare for an installation, Dougherty conducts a preliminary site visit to make sure he can create a piece that will fit seamlessly into the space and feel as if it is part of the landscape. He envisions each sculpture, sometimes sketching out ideas, but like other artists, he often lets serendipity take over and trusts the creative process.

Materials for each installation are gathered from wherever they are plentiful, sometimes even the side of the road. *A Waltz in the Woods* was created from willow saplings which



were brought in from a willow nursery in Fredonia, New York. The branches are cut to various sizes (with a goal of utilizing all of the material), the largest stems are secured into the ground to provide stability for the framework, and then the weaving begins. While this process involves conscious molding and shaping, Dougherty says he watches how it's evolving, and makes enhancements along the way to make the sculpture more intriguing. The final phase is cosmetic. Fine tuning involves erasing lines he doesn't like, filling gaps with additional material, cutting away extraneous pieces, and embellishing with artful touches.

With each new work, Dougherty relies heavily on volunteers to help him in preparing materials and in crafting the actual sculpture. Watching him interact, one senses the pleasure he derives in allowing others to help create the piece. He says that while sculptors can be obsessive, he truly loves meeting and working with new people. His gentle, approachable demeanor is evident as he assists volunteers and provides direction, while no doubt overlooking subtle imperfections.

Dougherty is at peace with the fact that his creations are ephemeral. "I believe that artists should make what they love," he says, adding, "The immediacy of looking is the power of art." While he has made a few pieces indoors, most of his works are created outside. His goal with each sculpture is to help people understand their relationship with nature. "My sculptures may remind people of a bird's nest, an indigenous

tribe they've visited, or just childhood play." Dougherty likes that his work is relevant to just about anyone. He says his infatuation with sticks far precedes him, going back to the early ages of hunters and gatherers. He takes advantage of the fact that most of us probably played with sticks as a child. Capitalizing on their flexibility and inherent ability to tangle is the basis for each of his creations. Dougherty recognizes that his works create different associations for each person, and that what is evoked is unique to the viewer. For him, in the end, it is all about connections. "Sometimes we all just need to be reminded of our place in nature."

This exhibit was made possible with support from the Madeleine K. Butcher Endowment and from Jane Korman.





Photos: Paul Meyer

Shade Trees for Small Spaces

ANTHONY AIELLO, *The Gayle E. Maloney Director of Horticulture & Curator*

Summer is my favorite time of year, and nothing beats sitting under a spreading shade tree on a lazy summer day, enjoying something fresh from the garden or an ice-cold drink. Many of us do not have the space for a full-sized shade tree or prefer not to have a large tree by the patio or close to the house. But, do not worry, there are plenty of options of small to medium-sized trees that fit the bill of providing shade in the garden, while also being in scale with smaller spaces, and not overwhelming to the area in which they are planted.

By medium-sized trees, I am referring to trees that grow to between 15-25 feet within approximately 20 years. Think of these as plants that grow to between one and two stories tall, and you can get a sense of how they might work in your landscape.

With so many options to choose from, it is hard to pick a few, so here is an assortment that gives a variety of options. This list is not comprehensive, but can at least give you a good starting point when thinking about what to plant. Almost all of these plants require at least one half day or more of sun, and I have indicated those which require more particular growing conditions.

A Trio of Maples

Acer griseum – paperbark maple: a true multi-season plant (see *Seasons*, Spring 2015), with fabulous copper-colored bark and great orange and red fall color.

Acer triflorum – three-flowered maple: a close relative of paperbark maple, with light tan, peeling bark and fall color that includes yellows, oranges, and reds.

Acer pensylvanicum – moosewood: a native of the eastern U.S., moosewood is known for its smooth green bark that is accented with white markings. Moosewood does not grow particularly well in our part of the state, but is well-suited in central Pennsylvania or further north. For best results in our area, trees should be grown in a cool site, with moist, well-drained, and slightly acidic soil.

Native Trees

Carpinus caroliniana – American hornbeam: a tree that can be found throughout the Wissahickon Valley and elsewhere in the eastern U.S. It is not planted very often, but this is an excellent choice for a slow-growing tree that will not outgrow

its space. Sometimes called muscledwood because of its smooth grey bark that resembles muscles, its fall color includes oranges and yellows.

Cornus florida – flowering dogwood: one of most beautiful of our native flowering trees, with large white bracts emerging before the leaves in April. This tree has great burgundy-red fall color early in the autumn, and is an excellent food source for birds. There are many varieties commercially available.

Magnolia virginiana – sweetbay magnolia: one of the most adaptable magnolias, and of all of the trees in the list it is probably the best for urban conditions or heavy soils. Sweetbay is notable for its small, but fragrant, flowers in mid-June. Some varieties (*M. virginiana* var. *australis*) such as ‘Milton’, ‘Henry Hicks’, and ‘Green Bay’ are evergreen, holding their leaves throughout the winter.

Ostrya virginiana – American hop-hornbeam: another North American native species, it is similar in scale to moosewood, with shredding bark and good fall color that is also yellow and orange. This is a tough tree that is good for urban conditions.

Flowering Cherries

Prunus ‘Okame’ – Okame cherry: one of the first cherries to flower in early spring, with dark pink flowers. Dark burgundy bark and good burgundy-red fall color are added attractions of this tree.

P. subhirtella – Higan cherry: small white flowers cover this tree in early to mid-April, making it a true sign that spring has arrived.



P. × yedoensis – a larger tree than most of the others on this list, with white to pale pink flowers in early to mid-April. This tree is best used in slightly larger spaces.

Other Favorites

Cornus kousa – kousa dogwood: the Asian equivalent of our native flowering dogwood, with large white bracts emerging after the leaves in May and June. It has great reddish fall color early in autumn, and beautiful bark. It is also another great multi-season plant.

Magnolia stellata – star magnolia: native to Japan, one of the earliest magnolias to flower with bright white flowers in late March and early April.

Stewartia pseudocamellia – Japanese stewartia: probably the most finicky plant on this list, and one that prefers a rich, well-drained soil, high in organic matter. However, this is a plant that rewards throughout the year, with beautiful exfoliating bark, flowers in early summer, and fantastic fall color. If you can grow this plant, it is one of the best to have in the garden.

With all of these to choose from, you are certain to find something to suit your space and taste. So, go ahead, happy planting, and sit back and enjoy for years to come.

JUNE

**Garden Railway Display –
Art and Architecture**

*Daily through Labor Day
Weekends only through Oct. 12*
Open weekdays 10am-4pm, and
10am-5pm on weekends. Wednesday
evenings in June, July and August, the
Arboretum is open until 8pm. From
miniatures of iconic Philadelphia
sculptures and famous lighthouses, to
buildings from the last World's Fair
in 1964, and more, visitors will once
again thrill to the outdoor model train
exhibit with a quarter-mile track. The
Morris Arboretum is grateful for a
generous gift from longtime friends,
Gwen and Ed Asplundh, in support of
the Garden Railway.

2 Storytime

Tuesday, June 2, 10:30-11am

Join us for a fun and engaging
reading session among the trees.
Storytime is held at the Outdoor
Children's Classroom, next to the
Widener Visitor Center. In the case
of inclement weather, storytime will
be held in the Upper Gallery at the
Visitor Center. Storytime is free for
members or with regular admission.
Advance registration is required and
registration is open for one month in
advance of upcoming storytime events.

3 Open Evenings

*Wednesday, June 3 through
August 26*

Garden open for visitation until 8pm.

**5 Moonlight & Roses presented by
The Haverford Trust Company**

Friday, June 5, 6pm-midnight
See page 16 for more information.

**6 Garden Discovery Series –
Supermarket Botany**

Saturday, June 6, 11am-3pm
Did you know that most of the fresh
food found in supermarkets comes
from plants? Visit the Discovery
Table on *Out on a Limb* and conduct
a supermarket botany investigation.
Match a variety of edible fruits and
vegetables to their plant.

**6 Enchantment Theatre Company
presents The Brave Little Tailor**

Saturday, June 6, 2pm
With expressive masks, life-
size puppets, original music
and imaginative scenic effects,
Enchantment Theatre Company
brings this beloved story to life in its
uniquely magical way! This 45-minute
performance will take place in the
Azalea Meadow followed by Q & A.

**11 WXPN Kids' Corner Concert –
The Cat's Pajamas**

Thursday, June 11, 6:30-7:30pm
See page 21 for detailed information
and cost.

**18 WXPN Kids' Corner Concert -
Alex & The Kaleidoscope Band**

Thursday, June 18, 6:30-7:30pm
See page 21 for detailed information
and cost.

**21 STEAMPunk Expo**

Sunday, June 21, 10am-8pm

Explore the power of the past through
the world of STEAM –Science,
Technology, Engineering, Arts and
Math. The day will feature activity
stations throughout the garden,
talks, workshops, and musical
entertainment. Purchase tickets
through TicketLeap at [http://
morrisarboretum.ticketleap.com/
admin/events/steampunk-expo](http://morrisarboretum.ticketleap.com/admin/events/steampunk-expo). See
back cover for more information.

**21 Grist Mill Demonstration Day
at Bloomfield Farm**

Sunday, June 21, 12-4pm

The Springfield Mills at Morris
Arboretum has been carefully restored
and made operational once again by a
dedicated group of volunteers. Come
visit this 19th century mill and see
how corn was milled for meal and
flour. *Free for members, \$5 for non-
members or free with regular garden
admission or STEAMPunk Expo ticket.*

23 Storytime

Tuesday, June 23, 10:30-11am
See June 2 for detailed information.

**25 WXPN Kids' Corner Concert –
The Plants**

Thursday, June 25, 6:30-7:30pm
See page 21 for detailed information
and cost.

**27 Circus Week at the Garden
Railway**

*Saturday, June 27 through
Sunday, July 5, Daily 10am-4pm,
Wednesday until 8pm, and
weekends until 5pm.*

The first circus was held in
Philadelphia in 1793. Come see the
Big Top and the circus trains, learn
the history of the circus, and watch for
a few surprises.

Photo: Judy Miller



discover some important products that trees provide for us every day. Many may surprise you!

7 Storytime

Tuesday, July 7, 10:30-11am

See June 2 for detailed information.

11 Thomas the Tank Engine & Friends at the Garden Railway

Saturday, July 11 & Sunday, July 12, 10am-5pm

Come visit the Garden Railway and see Thomas & Friends take over the tracks.

15 Commonwealth Classic Theater presents *The Tempest*

Wednesday, July 15, 6:30pm

Enjoy theatre outdoors under the summer skies as Commonwealth Classic Theatre Company presents William Shakespeare's *The Tempest*. Directed by Allen Radway, this production will enchant audiences as it charts a journey of self-discovery and redemption. Featuring respected, veteran actor, David Howey (formerly of the Royal Shakespeare Company and Royal National Theatre), and a cast of 12, this production will make the journey from revenge to forgiveness impossible to forget.

19 Grist Mill Demonstration Day at Bloomfield Farm

Sunday, July 19, 1-4pm

See June 21 for detailed information.

21 Storytime

Tuesday, July 21, 10:30-11am

See June 2 for detailed information.

AUGUST

1 Garden Discovery Series – Discover Seeds!

Saturday, August 1st, 11am-3pm

Join us on *Out on a Limb* and learn about the different variety of seeds and how they travel from one place to another. Afterward, create your very own seed mosaic to take with you.

4 Storytime

Tuesday, August 4, 10:30-11am

See June 2 for detailed information.

8 Thomas the Tank Engine & Friends at the Garden Railway

Saturday, August 8 & Sunday, August 9, 10am-5pm

Come visit the Garden Railway and see Thomas & Friends take over the tracks.

16 Grist Mill Demonstration Day at Bloomfield Farm

Sunday, August 16, 1-4pm

See June 21 for detailed information.

25 Storytime

Tuesday, August 25, 10:30-11am

See June 2 for detailed information.

29 Circus Week at the Garden Railway

Saturday, August 29 through

Monday, September 7, Daily

10am-4pm, Wednesday until 8pm, and weekends until 5pm.

The first circus was held in Philadelphia in 1793. Come see the Big Top and the circus trains, learn the history of the circus and watch for a few surprises.

SEPTEMBER

5 Garden Discovery Series – Leaf Wreath Fun

Saturday, September 5,

11am-3pm

Join us on *Out on a Limb* and learn to identify some of the fall leaves you will discover as you stroll through the Arboretum. You'll discover why leaves change colors, and afterward, create your own fall leaf wreath to take home using recycled paper.



Photo: Carolyn Clement

6 Grandparents Day

Sunday, September 6, 10am-4pm

BYOG (bring your own grandparent) to Morris Arboretum on National Grandparents Day! Kids who bring a grandparent get \$3 off admission, making Youth admission \$5. Enjoy the "Founding Treasures" map of the garden. Just as grandparents are the founding treasures of their families, the buildings, trees, and sculpture highlighted on the "Founding Treasures" map are the Arboretum's iconic riches.

19 Culture Connection: Exploring Korean Heritage

Saturday, September 19,

11am-3pm

Celebrate Korean culture with music and dance performances, food tastings, hands-on activities, and an exploration of the Korean plants of the Arboretum's botanical collection. This event is made possible by a grant from the University of Pennsylvania's Provost Interdisciplinary Arts Fund.

20 Grist Mill Demonstration Day at Bloomfield Farm

Sunday, September 20, 1-4pm

See June 21 for detailed information.



Photo: Tiffany Stahl

ADMISSION

Adults (18 - 64yrs.)	\$16
Senior (65+yrs.)	\$14
Children (3 - 17yrs.)	\$8
Members	FREE

* Please note, Arboretum events are subject to change without notice.

In the event of inclement weather, please check the website at www.morrisarboretum.org for information or call (215) 247-5777, ext. 0.

Reinterpreting Roses: The Morris Arboretum Rose Garden

JENNIFER LAUER, *Rose and Flower Garden Intern*

Let's face it: most of us are at least a little intimidated by the thought of growing roses. We've all heard the horror stories—roses are temperamental, prone to disease and pests, and require a lot of maintenance. You might think, "Maybe an expert horticulturist can grow roses, but I certainly can't."

Not necessarily. With a little bit of knowledge and the right guidance, you can avoid the weekly chemical spraying and yearly pruning required of some roses. The level of care depends upon what kind of rose you choose. At the Arboretum, the rose garden is meant to display examples of roses that make excellent landscape shrubs for homeowners. Following in the footsteps of other notable gardens, including the New York Botanic Garden and the Scott Arboretum, we are re-evaluating our collection by removing disease-prone roses and replacing them with hardier, more resistant roses that have high landscape value.

As we begin this fascinating journey, we are intrigued by the roses which have been with us for centuries. These are the once-blooming 'species,' or wild roses, as well as the old



Rosa Oso Easy®Paprika – Abundant, spicy orange, summer flowers. Excellent specimen or mass planting, and highly disease resistant.

garden roses, both of which were popular garden roses at the turn of the 20th century. Interesting specimens grace both categories, though most homeowners overlook them in their quest for the classic 'rose' standard embodied by modern roses. But for those of us who do not want to tend them for hours and spray them with chemicals, there are distinct advantages in experimenting with old and species roses, many of whose informal habits and disease-resistance make them very well-suited for a low-maintenance mixed border or hedge.

One great example of a unique species rose at the Arboretum is *Rosa roxburghii*, the chestnut rose, which adorns the species rose berm along the path leading down to the fernery plaza. Its beautiful, lightly fragrant pink blooms are followed in fall by large chestnut-shaped hips. You may also find examples of *Rosa rugosa*, a practically invincible Japanese rose with wonderful fragrance, decorating the garden. The *rugosa* rose 'Blanc Double de Coubert' is particularly enticing, with ivory double-blooms contrasting starkly against its lustrous, deep green foliage. Not only do you not have to spray *rugosas*, they actually resent spray and will defoliate after application. Another fantastic old garden rose—and one of my favorites—is *Rosa* 'Belle Isis,' a Belgian rose with a strong scent of myrrh. It produces intoxicatingly perfumed blooms with dense



Rosa CAREFREE WONDER – Known for superior disease resistance; can also withstand very hot temperatures.

Photo: Yoko Nekonomania

pink petals, and has been admired by gardeners since the mid-1800s.

The roses above produce hips (fruit) in the fall. Usually bright red, but sometimes orange, purple, or black, rose hips are sure to catch the eye of the passerby—and the birds! But for those who can't live with roses that don't repeat their flower display in autumn, there are many shrub roses, such as *Rosa* Oso Easy® Paprika or *Rosa* 'MEIpitac' CAREFREE WONDER, which bloom all season—from June until frost! Talented breeders are also hybridizing the repeat-bloom traits of modern roses with the disease-resistant traits of wild roses—bringing new, never-before-seen shrubs onto the market, such as *Rosa* Oso Happy® Smoothie. Work is also being done in this area to produce new roses that will have superior resistance to rose rosette disease. In short, the world of roses continues to evolve, and our garden will evolve with it. Stay tuned for roses we plant as we redesign the garden.



Rosa 'Blanc Double de Coubert' – A hybrid rugosa combines disease-tolerance with double-blooms transforming to bright red hips. Rugosas are wild roses, well-known for their reliability—so much so they've been nicknamed the "rugged rose." No spraying needed!

Photo: gardenphotographs.net



Front row (left to right): Joan Bregy, Carol Reznikoff, Phyllis Flail, Emilie Bregy, and Anne Saltman. Back row (left to right): Emilie's sons-in-law, Charles Flail, Ira Reznikoff and Roger Saltman. Photo courtesy of the Bregy family.

Rose Garden Gift Honors Emilie "Kayo" Bregy

Friend and member, Emilie "Kayo" Bregy will celebrate her 95th birthday on August 16. To commemorate this milestone, her four daughters, Joan Bregy, Phyllis Flail, Carol Renzikoff, and Ann Saltman, have made a gift that will allow for the purchase of new plants for the Rose Garden. The Rose Garden and the Morris Arboretum have been a special part of Kayo's family's history. Her mother, Marion Rivinus, was an active volunteer who served as president of the Morris Arboretum Association from 1956-67. She also served as a member of the Advisory Board of Managers from 1961 until her death in 1981. Marion's volunteer service was recognized when the Rose Garden was dedicated in her name in 1974. Kayo and her daughters have many fond memories of visiting the Arboretum.

The Morris Arboretum community extends happy birthday wishes to Kayo, and hopes that she and her family continue to make memories here for many years to come!

Citizen Science at the Morris Arboretum

ANNA BOWER, *The Hay Honey Farm Endowed Natural Areas Intern*

Most of us living in the Philadelphia region are familiar with the Wissahickon creek and the opportunities it provides for outdoor recreation and environmental awareness. But did you know the Wissahickon Valley Watershed Association (WVWA) has a group of citizen scientists evaluating the health of the watershed year-round? Since last summer, teams of 70 creek watchers have performed monthly stream health assessments throughout 34 sections of the Wissahickon and its tributaries, through the Delaware River Watershed Initiative and a grant provided by the William Penn Foundation.

Before this initiative, WVWA staff could only monitor 13 sites, four times a year. Fortunately, by engaging volunteers involved with the creek watch program, they have been able to record additional information, and observe long-term trends in the health of the creek. Currently, 83% of the Wissahickon watershed is categorized as “impaired” by EPA standards, due mostly to the large amount of stormwater runoff entering the creek. Continued bank erosion, lack of riparian vegetative buffers, and sedimentation are problems found throughout the entire watershed.

Since this past August, I have volunteered with WVWA as a creek watcher. My section encompasses the area where the Wissahickon passes through the Morris Arboretum. Each creek watching team is assigned a monitoring site and a



Looking upstream from the monitoring site on the limestone outcrop. Photos courtesy of Anna Bower

walking segment of their section. Here at the Arboretum, the monitoring site of most concern to WVWA is on the Bloomfield Farm property by Springfield Mills. Water velocity increases dramatically in this section due to a limestone outcrop, and erosion is a concern on the opposite bank.

Together with my creek watch partner, Jeff Clark, we take visual assessments on water clarity, surface coatings, odor, stream bed color, percent shade cover, leaf packs, and erosion. Habitat assessment surveys are conducted by observing sediment deposition, channel patterns, bank stability, and riparian vegetation zones. We are also members of the wading team, gathering quantitative measurements of water chemistry such as temperature, pH, alkalinity, and phosphate and nitrate levels in parts per million using test kits. Throughout our section, we have observed several bird species including osprey, great blue herons, mallards, eagles, and a pair of kingfishers. We have removed trash caught on fallen logs, and recorded observations such as few leaf packs which are important for insect life, and any new sedimentation or erosion.

Our observations are sent back to WVWA and combined with adjacent sections to create a summarized monthly digest, available on WVWA’s website. These reports highlight interesting photographs, trends, and issues that need to be addressed within the watershed. For more information about the creek watch program please visit <http://www.wvwa.org/creekwatch/> or contact Stephanie Figary, Water Quality Program Manager, at stephanie@wvwa.org.



Re-Tree the Avenue

Chestnut Hill is one of Philadelphia's most beautiful, historic, and desirable neighborhoods. Recently, the Chestnut Hill Community Association formed a Green Space Initiative to coordinate the restoration, maintenance, and expansion of the commercial, residential, and public green spaces in the community. Funded through the Chestnut Hill Community Fund, the committee consists of residents, business people, and representatives from community organizations, including Morris Arboretum Executive Director, Paul Meyer. The committee designated the "re-treeing" of Germantown Avenue as its inaugural project. After surveying Germantown Avenue from Bethlehem Pike to Cresheim Valley Drive, 70 locations were identified that would benefit from the planting of a new tree.

The cost of planting and nurturing 70 new trees is significant. Fundraising for the program is underway and will continue as the project unfolds, with the hope of attracting both public and private donations. Donations will be used to pay for the trees (which cost between \$400-600 each), as well as to cover additional costs, such as topsoil, removing debris, and the addition of granite blocks around the tree wells. The trees will then need to be watered at least weekly for the first year, and maintained thereafter.

The committee has plans to install a variety of species. A mix of species will create visual impact in the tree clusters, without planting too many of the same type of tree in one area. The actual planting of the trees will begin this fall.

While enhancing Germantown Avenue is the first priority, the long-term goal is to continue the program beyond the Avenue to engage and enhance the broader community.

For more information or to donate to the fund, visit www.chestnuthill.org/gsi.

Photo: Paul Meyer



One of the first trees to be planted is a flowering cherry supported by Elliot Schwartz of the Carol Schwartz Gallery in memory of his wife, Carol. A portion of the proceeds from the Schwartz Gallery's current exhibit will support the tree planting efforts along Germantown Avenue.



Photo: Mark Stehle

Moonlight & Roses Presented by The Haverford Trust Company

It's not too late to reserve a space at the most popular garden party of the year! *Moonlight & Roses presented by The Haverford Trust Company* will take place on Friday, June 5, beginning with cocktails and hors d'oeuvres in the Rose Garden at 6pm, followed by dinner and dancing in the fabulous moonlit tent. Natalie and Ralph Hirshorn and Elizabeth and Kyle Salata are co-chairing this year's event, and the Morris Arboretum is delighted to recognize longtime friends and supporters Susan and Moses Feldman as our 2015 honorees. Reservations are required and space is very limited. To register, please contact Kristen Casalenuovo at (215) 247-5777, ext. 418 or kcasal@upenn.edu no later than May 27.



Nature's Positive Impact

Arboretum staff member Joseph Mellon received an MS in Human Services Administration from Chestnut Hill College last fall. Following is an excerpt from his graduate thesis abstract.

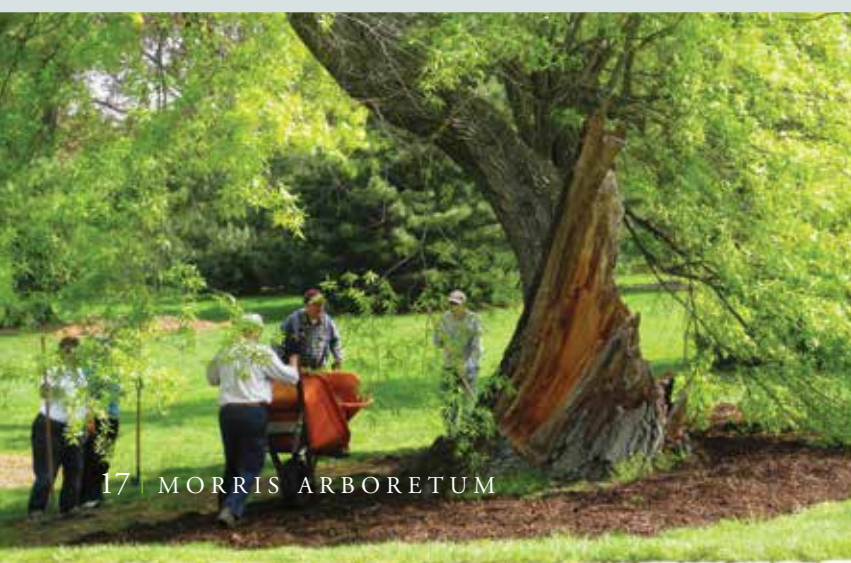
Nature and outdoor activities provide people of all ages and backgrounds with a sense of calm, inspiration, and renewal. There are many volunteers at the Morris Arboretum who take part in activities that are outside.

While engaged in their activities in nature, volunteers benefit themselves as well as the areas they are working in. The work they undertake provides them with physical exercise, which in turn benefits them cognitively and psychologically.

The benefits volunteers provide to natural environments vary, but they are always aimed at making positive changes to preserve the environment for today and for the future. These activities need to be advertised to a greater portion of the population in order to promote participation by a technology dependent society.

The Arboretum has many outdoor volunteer opportunities. Visit www.morrisarboretum.org to find one that suits you!

Photos: Liza Hawley, Arnold Winkler, Becky Schultz



Awakening the Senses Project Manager Named

In February, the Morris Arboretum welcomed Stacey Kutish to the Public Programs department as Digital Interpretation Project Coordinator, where she will be responsible for implementing *Awakening the Senses: New Interpretive Approaches at the Morris Arboretum*. This project is made possible by a Exhibitions & Public Interpretation grant from The Pew Center for Arts & Heritage. This is a term position for the duration of the grant that runs through December 2016. Stacey will lead an inter-departmental team to integrate mobile technologies into the Arboretum's visitor education programs, make collection information accessible to all visitors, and increase understanding of the organization's research and land management missions. New techniques for immersive visitor learning will be piloted and evaluated, including social media platforms among multigenerational visitor groups in the public garden environment.

Stacey is completing her MFA from University of the Arts with a degree in Museum Exhibition Planning and Design.

She has held several professional positions at Swarthmore College since 2004, including Special Projects Manager, Associate Director for Communications, and Director of International Recruitment. She has developed interactive exhibits for the Walters Art Museum, Baltimore, and held internships at the National Constitution Center and the American Swedish Historical Museum. She has extensive experience with communications and marketing, including program and audience assessment.

Stacey is a long-time volunteer with the Scott Arboretum where she served on the Museum Assessment Program recertification team and the Crum Woods Stewardship Committee, as well as assisting with the Plant Sale. She is the volunteer web manager for the Borough of Rutledge, where she is an avid home gardener.



Photo courtesy of Stacey Kutish

Last fall, Tracy Beerley, the Morris Arboretum's McCausland Natural Areas Horticulturist, received a Master of Science degree Environmental Studies from the University of Pennsylvania. The following is an abstract from her capstone project:

An Adaptive Management Plan for the Natural Lands Section of Morris Arboretum of The University of Pennsylvania

The Morris Arboretum of the University of Pennsylvania is a public garden and educational institution located in the northwest corner of Philadelphia County, Pennsylvania. This project has assembled an adaptive management plan for the Natural Lands Section of Morris Arboretum. The framework for an adaptive management plan includes the following steps: (1) assessment of the current status of the site; (2) determination of future desired conditions with measurable objectives; (3) design and implementation of ways to accomplish desired objectives; and (4) monitoring and evaluation.

Physical conditions including geology, hydrology, soils and topography were obtained to gain information about the Natural Lands Section. A botanical survey of the canopy, understory and herbaceous layers was conducted to gather baseline data on the abundance and diversity of plant species. With existing knowledge and data gained through the survey, descriptions of the desired conditions with measurable objectives were described in moderate detail. Monitoring and evaluation is a critical component of an adaptive plan, however the timeline for the task is beyond the scope of this project. The results of this project further reveal the ecological issues associated with an urban landscape disturbed by the negative impacts from overpopulation of deer and invasive plant species. Overall, this project has assembled an adaptive management plan for a variety of purposes including operational management, planning, and fundraising for future development.

Out on a Limb Wins National 2015 Buildy Award

The Morris Arboretum was one of two museums to win the 2015 Building Museums “Buildy” Award in recognition of its exemplary accomplishment in leading an institution through the challenging process of creating new museum construction. The Buildy Award reflects new attitudes that are beginning to guide the process of institutional growth and building design in the 21st century: respectful and appropriate attention to context, careful pre-planning to model business growth, engagement with user groups and the surrounding community, consideration of building impacts beyond the site boundaries,

Photo: Jaime Perez



conservation of resources, and planning for the future. *Out on a Limb* exemplifies these guidelines with success.

A visitor favorite, *Out on a Limb's* impact at the Arboretum has been significant. Arboretum attendance and membership increased by 30% the year it opened in 2009, with those levels sustained to date.



Photo: Christopher Dorman.

The Shop

CHRISTOPHER DORMAN, Assistant Director, Visitor Services and Hospitality

The vision of the Morris Arboretum is to be a resource and champion when it comes to sparking an appreciation for the world's ecology and the importance of plants and nature to people. Like every other facet of the Arboretum, the Shop plays an important part in seeing that vision come to fruition, particularly when it comes to inspiring children to learn about, appreciate, and engage with nature.

Young visitors to the Arboretum make a beeline for the Shop in eager anticipation of finding that #1 thing to take with them as a memento of their amazing adventure at the Arboretum. However, they will not find the latest handheld video game device or remote controlled rolling thunder semi-truck. At the Shop they will find fun and educational books (such as *Who Lives in Your Backyard* and *20 Ways to Draw a Tulip*) that connect them to nature. There are bug magnifiers, fort-building Sticklets™, and nature bingo sets to get them outdoors and exploring the natural world around them. They will be able to engage in their own nature-related play with stretchy insects, squirrel puppets, and “break your own” geode rock kits. It's all about hands-on fun – be it painting their own birdhouse, making their own sock owl, or growing their own herb garden.

At the end of the day, when they have explored the trees of the Arboretum, watched the swans glide on the pond, and dangled *Out on a Limb*, the Shop offers the chance for them to take a little nature with them, and continue their adventures at home.

Summer Classes

Summer offers unique ways to experience the Morris Arboretum and special learning opportunities. A visitor favorite is the outdoor yoga series, *Yoga in the Garden*: Ten Enchanted Evenings and *Yoga Out on a Limb*. Reduce stress, improve your balance, get fit, and enjoy the garden on beautiful summer nights with Yoga in the Garden.

Yoga Out on a Limb offers a wonderful way to start your Sunday morning, surrounded by the Arboretum's tree canopy. Classes are taught by Jennifer Schelter and feature Vinyasa or flow-style yoga. Pre-registration is strongly encouraged as space is limited.

Yoga in the Garden: Ten Enchanted Evenings

Ten Tuesdays: June 2, 9, 16, 23, 30, July 7, 14, 21, 28, and August 4 7-8:15pm

Members: \$180 for ten sessions, \$100 for five sessions. Non-members: \$200 for ten sessions, \$120 for five sessions.

Yoga Out on a Limb

Four Sundays: June 14, July 12, August 9 and September 13 8:30-10am

Members: \$75, Non-members: \$80

*Walk-ins for both series: \$25 per session, cash and checks only.

Mini Radiant Yoga Retreat

Saturday, June 13, 10am-2pm

Members: \$75, Non-members: \$85.

Give yourself time to unplug and refocus. The benefits of this mini retreat include revitalization, inspiration, physical flexibility, strength, balance, and fun.

Hydrangea Heaven: Class and Garden Tour

Saturday, June 27, 10am-1pm

Members: \$40, Non-members: \$45

This class will showcase this wonderful group of plants and illustrate why they are a must for every garden. Hydrangeas provide floral display throughout the summer, and winter interest with their peeling bark. Participants will discover

Photo: Arnold Winkler



Photo: Judy Miller



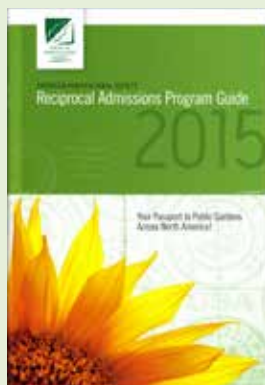
this versatile group of plants, tour some of the specimens at the Arboretum, and even visit the instructor's own nearby garden.

Mini-Morris Players (Ages 5-10)

Four Wednesdays: July 8, 15, 22, and 29, 6:30-7:45pm

Members: \$80, Non-members: \$100

This fun-filled, four-week series where children will create short outdoor plays incorporating their garden surroundings into the story. With simple props and costumes, the young performers will become the trees, shrubs, flowers, streams, and animals, celebrating the natural history of the Morris Arboretum. Children will learn their parts and hone their acting skills, culminating in a performance at the end of each evening for their families. Pre-registration required. Register at online. morrisarboretum.org/GrowingMinds or call (215) 247-5777, ext. 125.



Take your membership card on the road

With your valid Morris Arboretum membership card, you can receive free or discounted admission to more than 300 gardens across North America through the American Horticultural Society's Reciprocal Gardens Program (RAP)! Local favorites include: Camden Children's Garden, Hershey Gardens, and Tyler Arboretum. Be sure to check the website or phone the garden you are visiting to learn more about the specifics of the discount they offer. For a complete listing of participating organizations visit <http://www.ahs.org/gardening-programs/rap>. Or, if you wish to have a printed copy, they are available for purchase in the Arboretum's Shop for just \$2.

Summer Concerts at the Arboretum

**Save Time and Money –
Purchase Your Tickets Online!**

WXPN Kids' Corner Concert – The Cat's Pajamas

Thursday, June 11, 6:30-7:30pm

For 25 years, The Cat's Pajamas have been making very cool music for kids. The Cats put on more than a concert—they invite the audience from the very first note to enter a wild, wonderful world of stories, dance, puppets and props, all backed by a band making great music.

WXPN Kids' Corner Concert – Alex & The Kaleidoscope Band

Thursday, June 18, 6:30-7:30pm

Enjoy music from the heart, for the heart, that connects parents and children, allowing them to make memories that will last a lifetime.

WXPN Kids' Corner Concert – The Plants

Thursday, June 25, 6:30-7:30pm

Following up the success of their second CD, *In Full Bloom*, a Philly local favorite, The Plants, are preparing to launch new music on *The Harvest*. The lighthearted music of The Plants is catchy, often times silly, and fun for children and adults alike.

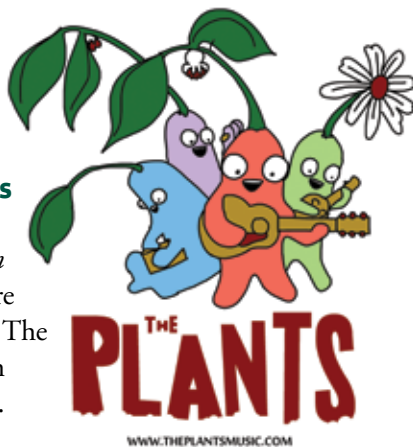


Photo: Arnold Winkler

Make sure to check out the healthy and delicious smoothie samples that will be available at each concert courtesy of Green Soul of Chestnut Hill!

Ticket prices are:

Pre-ticketing online: \$8/member adult, \$4/member child; \$16/non-member adult, \$8/non-member child.

At the gate (if available): \$10/member adult, \$5/member child; \$18/non-member adult, \$10/non-member child.

Advance purchase concert tickets are available through Ticket Leap. Visitors are strongly encouraged to buy tickets ahead of time to receive a discount and guarantee admission. This will also greatly assist in expediting entrance times. Some remaining tickets may be available to purchase at the gate, however the event may be sold out.



Looking Ahead to Fall

Summer is here, but we're already thinking about fall! The much-anticipated Scarecrow Design Contest will return this fall and more than 30 scarecrows will be on display from October 3 to October 18 along the Oak Allée. This year, there will be one theme, "Famous Art & Artists," with five prize winners chosen. Check online at www.morrisarboretum.org in mid-August for more information about registration.

The Fall Festival will also return for two days on October 3rd and 4th. Save the dates and make plans for a day (or two!) of family fun. Make a scarecrow, paint a pumpkin, sample a great variety of apples and much more. This event is always a visitor favorite!

Photo: Arnold Winkler

Connections Beyond Our Garden— Talks on People, Plants and Place

Plants and gardens connect us to the larger world and myriad aspects of the human condition.

Now in its sixth year, *Connections Beyond Our Garden – Talks on People, Plants and Place* will present three important and interesting talks that make connections and share impacts from very different perspectives.

A reception with refreshments will follow each presentation. Reservations and payment are required in advance as space is limited. The cost is \$15 for members and \$20 for non-members. To register, visit online, morrisarboretum.org/classes, or call (215) 247-5777, ext. 125.



Photo: Daniel Janzen

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

Wednesday, October 7, 2pm

Daniel Janzen divides his time between his professorship in conservation biology at Penn and field work in Costa Rica at Area de Conservacion, Guanacaste. One of the oldest, largest, and most successful habitat restoration projects in the world, Janzen and his wife,

Dr. Winnie Hallwachs, have spent decades constructing this World Heritage site devoted to answering the question, “How can society use tropical wildlands, and all of their biodiversity, without destroying them?”

Sneak preview:

Wednesday, November 11, 2pm

Christopher Hirsheimer and Melissa Hamilton are co-founders of Canal House, an award-winning culinary publishing and design studio in Lambertville, NJ. They will inspire you with their creativity and love of all foods local and seasonal.

Wednesday, December 2, 2pm

Laurie Olin is one of landscape architecture's most respected leaders. The internationally acclaimed firm, OLIN, has designed many important sculpture gardens and public parks around the world and here in Philadelphia.

Travel with Morris Arboretum

Gardens, Wine, and Wilderness: A Tour of New Zealand

January 9 to 31, 2016

Imagine the trip of a lifetime. Under balmy skies, you will visit some of nature's most spectacular scenery, interspersed with wonderful examples of New Zealand culture showcasing its gardens, architecture, artistic creations, fine cuisine, and wine. Learn the history and culture of the land from those who love and care for it.

Garden Adventures, Ltd. has been designing and leading tours to New Zealand for nearly 20 years. In January 2016, we are proud to join forces for the seventh time to offer this opportunity to experience the mystery, beauty, and hospitality of New Zealand. With Richard Lyon, R.L.A., and Paul



Photo: Paul Meyer

Meyer, who is returning for his third visit to New Zealand, you are invited to escape winter while you explore, learn and relax in the gardens and natural wonders of this extraordinary destination. This trip is offered exclusively to Morris Arboretum members and Penn alumni. Just a few spots remain. Please contact Michelle Wexler at (215) 247-5777, ext. 131 to reserve your spot.



Seasons newsletter is printed on FSC® (Forest Stewardship Council™) certified paper, which supports the growth of responsible forest management worldwide through its international standards.

STEAMPunk Expo

Sunday, June 21, 10am-8pm

Explore the power of the past through the world of STEAM –Science, Technology, Engineering, Arts and Math. Before electricity and fossil fuels, steam was the power that drove adventure and exploration. Come to the Morris Arboretum for a day of events, fashion, food, and fun. Explore the “what if?” around every bend as you stroll the dynamic Victorian garden. Discover the alternative aesthetic of steampunk, where a re-imagined past creates a fantastic future. Watch the sun dip beyond the horizon as we celebrate the longest day of the year with an outdoor evening concert. Some events require an Expo ticket. To view prices and purchase tickets visit: <http://bit.ly/PHLsteampunk>.



Activities Free with Admission:

Power It Up! 11am-3pm

Visit activity stations throughout the garden where you can experience the fun as you build a wind-up toy, engineer a hot air balloon, or create a nature sun print. Stop by the Azalea Meadow stage for steampunk storytelling and a Steampunk fashion show featuring the Art Institute of Philadelphia. Finally, swing by the Lower Gallery of the Visitor Center to check out the Museum of Interesting Things.

Expo Ticket Exclusives (throughout the day):

Expo tickets are available through TicketLeap. Ticket holders will also have access to the following:

- Captivating talks and lectures from steampunk historian Mark Donnelly, floral instructor Phyllis Schaffer, and the Arboretum's own propagator Shelly Dillard.
- A Bartitsu workshop demonstrating how the Victorians used the power of physics to defend themselves from street thugs.
- The unclassifiable musical mayhem created by the band This Way to the Egress.
- Steampunk dinner – an Edwardian-inspired meal specially created by our chef using vintage recipes. This activity is an add-on to the Expo ticket and has an additional fee (\$35pp.).

Visit www.morrisarboretum.org for more exciting details.