

SEASONS

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CAMPAIGN INSERT



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*

Arboretum Launches Ever Green Campaign

As I travel both near and far, I run into friends of the Arboretum who remark on its great progress in recent decades. It has moved from a run-down, forgotten estate to what is now truly a world-class botanic garden. Not only have the gardens grown more beautiful, but the education and research programs have expanded dramatically. All of this progress was made possible through programs that generate earned income, and the many generous gifts that funded both restoration projects and endowments for continuing care and support. Today, thanks to these gifts, we serve more than 142,000 visitors each year. Many come to enjoy the gardens, while others participate in our robust programs. An important part of this progress was the \$61 million Always Growing campaign, which concluded at the end of 2012.



Photo: Paul W. Meyer

In April, the Morris Arboretum publicly launched a new fundraising campaign—Ever Green. This campaign has been designed to enhance the care of the gardens, historic features, and living collections, to improve both intellectual and physical access to the garden and, most important, to advance teaching and plant science initiatives.

The Ever Green Campaign will strengthen the financial foundations of the Arboretum while ensuring that past gains are protected and future progress propelled. The quiet phase of the campaign has been underway, and already more than \$20 million has been raised toward the \$36 million goal. For example, The Moses Feldman Family Foundation has established an endowed chair for the the Director of Facilities, which will help in preserving and caring for the Arboretum’s historic facilities. And this past spring, the Log Cabin, which is more than a century old, received a major renewal through a gift made in memory of George Brantz by his family.

Looking forward, plans are in place for improvements to the Rose Garden. Similarly, the heat distribution system in the Arboretum’s exquisite Fernery is in need of replacement. While both of these areas received major renovations more than 20 years ago in the mid-1990s, further renewal is now needed.

The Morris Arboretum is so much more than its gardens and structures. These facilities provide the setting for the education and research programs central to our mission. However, the Ever Green Campaign will also help to advance these programs. For example, one of our youth education goals is to provide support so that schools can bring their students to the Arboretum regardless of financial ability.

Another important campaign goal is to provide broader, public access to the Arboretum via public transportation, and plans for a new pedestrian gate at the corner of Germantown and Hillcrest Avenues have been developed. Once funded and built, this entrance would be just steps from SEPTA bus stops, and would also provide easy access to those living in neighborhoods nearby.

And finally, successfully completing the Ever Green Campaign will ready the Arboretum to advance planning for an Education and Research Center at Bloomfield Farm. The Arboretum is desperately short on space for classrooms, laboratories, a library and a herbarium, and this new facility would be essential to both current and future programming.

As I look across the Arboretum’s arc of progress over the past 40 years, we have held a long range vision while defining incremental steps to achieve that vision. The Ever Green Campaign continues in this tradition as it will preserve past achievements while moving the Arboretum forward toward larger, visionary goals. Every gift to the Arboretum, both large and small, counts towards our campaign goal. Please join me and other Arboretum leaders in advancing this ambitious agenda.

Paul

SEASONS

Morris Arboretum of the
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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 events, register online and help us save trees! Email members@morrisarboretum.org to be added. To 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: Paul W. Meyer

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Photo: Paul W. Meyer



Experience *Time in the Garden*

Time is the essence of gardening and the natural world. Whether counting tree rings or planting seeds, the passage of time marks the life of the garden. This summer, experience *Time in the Garden* in new and different ways as the Morris Arboretum presents an indoor and outdoor exhibit. Talented artists were invited to submit ideas and samples of their work, and 18 artists were then selected for their unique and inspiring interpretation of the theme.

Many pieces were created specifically for the exhibit. Visitors will see a variety of works including beautiful ceramic tiles made for outdoor display, garden sculptures made with recycled parts, interesting works in metal, and cast stone oversized leaves.

Inside, at the Upper Gallery of the Widener Visitor Center, six artists, including two photographers and four painters, will exhibit their work, each bringing a distinctive, personal perspective to the *Time in the Garden* theme.



Photos: Paul W. Meyer

How Do Plants Tell Time?

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

Plants of all shapes, sizes, and types have remarkable mechanisms that have evolved to tell time, and a quick look around the garden provides many examples. The best-known example is tree rings, those annual concentric accumulations of wood that allow for easy understanding of the age of a tree and the growing conditions during its life. Growth rings may vary from year to year depending on light, temperature, rainfall, and length of the growing season. A branch of botanical study known as dendrochronology examines historical patterns of climate change through growth rings of trees. By looking at the change in a long-lived species, you can gain an understanding of environmental patterns over the life of an individual or group of trees.

The duration of a plant’s lifespan has enormous horticultural implications. Annuals complete their full life cycle from germination to seed production in only one year. Think of garden fruits and vegetables such as tomatoes, zucchini, and watermelon, or annual flowers such as marigolds, cosmos, and morning glories.

One of the most fascinating groups of plants are biennials, those that take two growing seasons to flower and complete their life cycle. In the first year, they produce leaves, a short stem, and send down roots, before going dormant and flowering in their second season. That rosette of leaves you see on on your foxglove or hollyhock seedlings this year will send out a flowering stem next year.

The most familiar garden plants are generally perennials, those that last for many years, flowering and fruiting each year. We generally think of perennials as herbaceous plants—think of irises, asters, daylilies, bleeding hearts, and a host of others—but trees and shrubs are also perennials. One of the most fascinating aspects of flowering perennials is their seasonality. Although the specific date of flowering for any species can vary among years, there is generally a reliable sequence based on day length and temperature. For instance, vernal witchhazels (*Hamamelis vernalis*) are the first to bloom in the winter, followed by the hybrid and Chinese witchhazels (*H. x intermedia* and *H. mollis*, respectively). As spring ensues, there is a familiar progression among the showy spring-flowering trees such as dogwoods (*Cornus*), magnolias (*Magnolia*), crabapples (*Malus*), and flowering cherries (*Prunus*). Flowering cherries provide a perfect example of the interplay between biological and environmental conditions, and if you have ever tried to visit Washington D.C. to see the flowering cherries, then you understand how bedeviling it can be to get the timing exactly right.

We shouldn’t forget autumn color in deciduous plants, and the sequence that it follows, again based on a combination of biology and environmental factors, with temperature and day length playing roles. Again, the timing can vary among years, but there is a sequence to fall color. As early as the end of August, I begin to see the first hints of color among the flowering dogwoods (*Cornus florida*), followed by the progression of sugar and red maples, oaks, and finally Japanese maples brightening things in early November.

Many of the sequences and changes that plants undergo throughout the year provide their own rhythms, and although you may not be able to set your watch by them, you can almost always turn the page of the calendar based on their timing.



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What Time is It?

DR. TIMOTHY BLOCK, *Director of Botany*

What does sugar have to do with telling time? A plant can give you the answer to that question! It may not be quite that simple, but plants do have a way to sense the time of day. Plant scientists at the University of Cambridge have shown that plants, like humans and other animals, have circadian clocks to regulate daily rhythms of behavior and metabolism, and sugar concentration is the key.

Plants turn carbon dioxide and water into sugars by capturing light energy in the process of photosynthesis, and it turns out that those sugars are a key part of how plants keep track of the time of day. As you would expect, the rate of photosynthesis varies greatly throughout a 24-hour period. Although plant metabolism doesn’t stop at night, photosynthesis does. In the morning when light becomes available, photosynthesis increases until the peak of sugar production is reached four to eight hours after dawn.

The actual regulation of circadian rhythms in plants is accomplished by expression of a gene called PRR7 (Pseudo-Response Regulator 7), but the expression of PRR7 is controlled by the concentration of sugars in plant cells. By depriving plants of carbon dioxide so photosynthesis could not proceed, the researchers at Cambridge were able to show that circadian rhythms in the plants could be maintained by adding sugars to the growth medium, even when the plants are grown in complete dark.

Since proper resonance between a plant’s internal clock and the external light-dark cycle is necessary for optimal growth, it was suggested that manipulation of circadian clocks in plants could be used to enhance food production in space exploration or colonization of other planets where the daily cycle may differ from 24 hours. However, questions remain as to whether the findings of these studies apply broadly across the plant kingdom.

Plants don’t need cell phones, or even good old-fashioned watches, to know the time of day. They simply rely on the rotation of the Earth and the physiological mechanisms provided by millions of years of evolution!

The experimental plant species in these studies was *Arabidopsis thaliana* (mouse-ear cress, pictured at left), the “workhorse” of plant physiology and genetics. Mouse-ear cress is a common, unassuming little annual plant in the mustard family (Brassicaceae) likely to be found in your own garden as a weed. However, it is the unquestioned star of this research on how plants tell time.

References:

Haydon, Michael J., et al. 2013. Photosynthetic entrainment of the *Arabidopsis thaliana* circadian clock. *Nature* 502: 689-692.

Dodd, Antony N., et al. 2005. Plant circadian clocks increase photosynthesis, growth, survival, and competitive advantage. *Science* 309: 630-633.



Photo: Paul W. Meyer

Time in the Garden with John and Lydia Morris

MARIE INGEGNERI, *Marketing Coordinator*

As board member and garden historian, Elizabeth McLean stated in the May-June 1987 Morris Arboretum newsletter, John and Lydia Morris’ summer home, Compton, “has been described as a perfect example of the Victorian landscape garden.” Much of the sibling’s time in the garden was spent building and maintaining these Victorian elements for their own personal enjoyment and for the horticultural information gained and shared.

By all accounts, John Morris was the garden architect, directing his many concepts by hiring companies and personnel to create the buildings and themed gardens throughout the estate. One of his first construction endeavors was the greenhouse, built in 1894 by Hitchings & Co. Unfortunately, it burned down three months later while the first head gardener, Patrick Finerghy was in charge. John replaced both—a new greenhouse within three months and a new head gardener, Conrad Ohnemuller, in 1895. This hire lasted two years when Ohnemuller resigned and John made arrangements for a new head gardener, Frank Gould, who held the position until he retired in 1919.



Photos: Courtesy of Morris Arboretum Archives

John and Lydia were traveling extensively at this time, exploring Europe, India and Asia. These journeys abroad, especially in the newly opened eastern world, influenced their garden aesthetic as evidenced by the plants and gardens put into place after their trips.

Back at Compton, John continued his innovative work in the garden. A well-known plantsman, he bought a label-making machine to map and label his trees and shrubs. He also hired the Japanese landscape architect, Y. Muto. The Hill and Water Garden, 1905, and the Japanese Overlook, 1912, were created “to the suggestion” of John Morris by Muto. As written by E.C. Jellett, in his 1914 book, *Germantown Gardens and Gardeners*, Compton was referred to as a “Japanese garden of the highest type and among local gardens it is first.”

John died in 1915, and his passing brought about changes to the garden. Lydia’s philosophy of gardening—the beauty versus the scientific—as relayed by Margaret Medlar, the daughter of the fourth head gardener, John Tonkin, was different from her brother’s. Medlar recounted that she believed Frank Gould left the job because he did not appreciate Lydia’s point of view as he did Mr. Morris’. Medlar went on, “As William Russell,” Lydia’s secretary, “says, she wanted a lady’s garden and that’s all she wanted.”



Lydia did direct the reconstruction of the Rose Garden, but no other major projects were undertaken. Instead, focus shifted to maintaining the flower gardens according to Lydia’s ideals.

She and John Tonkin, the newly promoted head gardener, would ride in her open Buick traversing the whole garden with Lydia telling Tonkin what she wanted done. This drive and discussion were a daily, weekday occurrence until her death in 1932.

John and Lydia’s combined efforts were rewarded with a blooming, well-manicured, and highly regarded garden that the pair took time to appreciate. Seats were installed within the garden that offered wide, sweeping vistas of the garden. And photographs show both John and Lydia in seated repose and walking within the garden.

To learn more about the estate years, visit the Morris Arboretum blog at bit.ly/MorrisBlog and read the Untold Stories of Compton by Joyce Munro.



Paul W. Meyer Awarded Prestigious Scott Medal



Photo: Lisa Roper

In March, Executive Director Paul Meyer received the 2018 Arthur Hoyt Scott Medal for his outstanding national contributions to the science and the art of gardening. The Scott Medal and Award was established in 1929. Paul was lauded for transforming the Morris Arboretum into an internationally acclaimed garden, multiplying its visitation, putting it on solid financial footing, creating its internship program, and developing its plant exploration program.

In presenting the award, Bill Thomas, Executive Director of Chanticleer and 2017 Scott Medal Recipient (pictured above with Claire Sawyers, Director of the Scott Arboretum of Swarthmore College), deemed Paul “horticultural royalty” and truly deserving of this crown. “Throughout his 40-year career, Paul has made outstanding regional, national, and global contributions to the science and art of gardening. Paul has led the renaissance of the Morris Arboretum of the University of Pennsylvania, making it an internationally significant institution known for its collections, aesthetics, education, and research. He has promoted collaboration and cooperation among international as well as local organizations, he is a world leader in plant exploration, and has been instrumental in preserving open space,” Thomas said.

In receiving this prestigious award, Paul pointed to others who share the credit. “This recognition would not be possible without the hard work of the Arboretum’s staff, board, and volunteers whose invaluable contributions enable Morris Arboretum to fulfill its role as a premier public garden.”



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“People need as much care and attention as plants. Paul masterfully provides leadership, support, and example, and does it with generosity, grace, and good humor.” — Peter del Tredici, The Arnold Arboretum of Harvard University and 1999 Scott Medal Recipient

“Paul led the way with [the Morris Arboretum’s] LEED Platinum Certified Horticulture Center featuring geothermal wells, a green roof, solar energy, water cisterns, and recycled materials. While moving forward with so much innovation, Paul has also respected the rich history and past of the Morris Arboretum.” — Holly Shimizu, Emeritus Executive Director of the US Botanic Gardens

“Paul seems happiest when sharing his knowledge with others. Clearly, it’s in his bones.” — Patrice Sutton, Assistant to the Director

Log Cabin Renovations



Photo: Courtesy of Morris Arboretum Archives

John and Lydia Morris originally built the log cabin as a garden retreat in 1908. They used it to entertain friends, and Lydia spent many hours on the porch enjoying the stream and woodlands. With its river-stone cobble chimney, the cabin is similar in style to those often built in the Adirondacks. The building was cool in the summer, and provided the warmth of a fireplace in the winter. Today, the serene location with its adjacent babbling brook continues to delight visitors, but the shady, damp environment can result in faster than normal deterioration to the structure.

This spring, many deteriorating logs, especially on the lower courses and around the perimeter of the deck were replaced using Canada hemlock that was harvested in northern Michigan. The work was completed by Intensified Wood Restorations of Munising, MI, a firm that specializes in environmentally friendly log home restorations. Previous renovations were completed in the mid-1990s, but more extensive work was needed this time. Additional renovations including a new interior floor and new exterior railings will be completed this summer.

This restoration is generously supported by Joan N. Brantz in loving memory of her husband, George M. Brantz (pictured below).



Photos: Paul W. Meyer

MAM Project Update

ANNE BARBER, Research Project Coordinator

The Mid-Atlantic Megalopolis (MAM) Project has entered its second year of funding from the National Science Foundation. This project aims to digitize herbarium specimens as a means to better characterize the Mid-Atlantic flora and understand how it has changed with urban growth. This year, we’ve added a 12th partner, the Penn State Herbarium, which has already begun contributing some of the 64,000 records they aim to add to our online database, bringing our expected project total to more than 800,000 records. Their records will add data for the flora of central Pennsylvania and the Susquehanna Valley, filling a hole in our growing body of knowledge of the flora from the greater Mid-Atlantic area.

Last February, we invited volunteers to celebrate Charles Darwin’s birthday with trivia, cake, and record transcription. This event further engaged the community in citizen science and strengthened the relationship between project staff and volunteers. To date, volunteers have transcribed at least 50,000 records for the project—a contribution for which we are so grateful and very excited about. We’re looking forward to continued volunteer engagement for the remainder of the grant. (If you are interested in joining our volunteer team, please contact me at annebar@upenn.edu.) One memorable trivia question from the event is shown below. See if you can think of the right answer.

Which of the following is not the title of a book written by Charles Darwin?

- a. *The Formation of Vegetable Mould, through the Action of Worms*
- b. *The Descent of Man, and Selection in Relation to Sex*
- c. *The Expression of the Emotions in Man and Animals*
- d. *Consanguinity, and the Breeding of Rabbits*

This summer, I will be traveling to New Zealand to present at the 33rd Annual Society for the Preservation of Natural History Collections (SPNHC). This year will be the first joint meeting between SPNHC and Biodiversity Information Standards (TDWG), bringing together expertise in natural history collections management and biodiversity informatics. The meeting will be held at the University of Otago and the Otago Museum in Dunedin. I will present findings from the MAM Project’s development of new imaging standards that will benefit an international community of herbarium digitization professionals. I’m honored to represent the Morris Arboretum at this conference.

Overall in the project, we are about halfway finished with imaging and about a third of the way finished with transcription. During our first year, we encountered some challenging technical difficulties that put us a bit behind schedule. However, we’ve been making considerable progress since then and have been fortunate to have some really incredible team members that continue to push the project forward. (P.S. The correct answer to the quiz question is d.)

Champion Transcriber Receives Gift for Effort

After completing the online transcription of more than 35,000 herbarium specimen records, Ann Rhoads, retired Morris Arboretum botanist, was given a copy of Andrea Wulf’s *Founding Gardeners* as a gift of thanks from Cindy Skema, lead principal investigator of the MAM Project and Morris Arboretum botanist.

Photo: Paul W. Meyer



Summer 2018

Campaign News for Friends of the Morris Arboretum

Dear Friends,

When I first became familiar with the Morris Arboretum nearly 35 years ago, it was a very different place. With only 30,000 visitors per year, the gardens were beautiful, yet many of our historic features and structures were in dire need of repair and refurbishment. The Arboretum was in the midst of a comprehensive, multi-decade Master Plan originally conceived in 1978. In the intervening years, we chipped away at many of our most pressing needs, refurbishing the gardens one project at a time, while ushering in incremental growth in audience with new features and programs. By 2002, with a rapidly growing visitation and membership base, the Arboretum was ready to launch a new kind of campaign—Always Growing—a 10-year effort that enabled us make the greatest strides yet toward the realization of the Master Plan’s vision.

We believe that the time has now come for our newest campaign—Ever Green—to fortify the incredible progress we’ve made over the past several decades.

We are the official Arboretum of the Commonwealth of Pennsylvania, an internationally respected center for plant research, and a favored destination for more than 140,000 garden and nature enthusiasts from across the region every year. We are proud that the Arboretum plays an important role as an advocate for all plant life, a steward for its preservation and care, and a disseminator of plant knowledge and appreciation. At a time when the natural world needs its advocates more than ever, the Arboretum must be a leader among its peer institutions who all share the ultimate goal of protecting, preserving, and nourishing our natural environment.

Now is the time for us to realize the full extent of the Arboretum’s value to the community.

Please join us as we turn the page at this exciting time in the Arboretum’s history. Your support will keep the Arboretum Ever Green for decades to come.

Ann Reed

Ann Reed
Chair, Ever Green
Member, Advisory Board of Managers



Morris Arboretum

A source of research and renewal that benefits our community and our world

Morris Arboretum is a leader among botanical gardens—as the comprehensive source of information on Pennsylvania plants, as a player in the effort to digitize the documentation of flora worldwide, and as a sensitively maintained oasis reflecting a healthy natural world. The Arboretum is an economic driver and cultural center, with programming that engages children, students, professionals, and Greater Philadelphia as a whole.

Ever Green will help us to preserve and enhance the Arboretum, broaden access to all of our resources, and support the expansion of our botanical and horticultural research efforts, which will continue to shed light on changes to the environment.

campaign PRIORITIES



Cultivate the Garden

to preserve historic Arboretum features, tend the living collection, and enhance visitor amenities.



Lead Research Initiatives

with endowment funds that support the professional, scientific study of plants, modernize record-keeping, and grow understanding of environmental changes and their impacts on the world.



Improve Public Access and Inclusion

with a pedestrian entrance on Germantown Avenue, expanded outreach, educational programs for underserved students, and the establishment of a named endowment for the Director of Education and Visitor Experience.



“A gift to the Morris Arboretum supports research and education that touches preschools, K-8 and high schools, colleges, and environmental professionals—which in turn enhances our entire community and beyond.”

— Paul W. Meyer, the F. Otto Haas Executive Director, Morris Arboretum




Photo: Paul Warcoal

MORRIS ARBORETUM BY THE NUMBERS

13,000+ 
TREE & PLANT SPECIMENS

5,000+
school children
visit annually

Plants from
34 
COUNTRIES
represented in the
living collection

140,000+
visitors
each year


92 Acres
of beautiful
public gardens

Leading efforts to digitize
700,000 
plant specimens from the
Mid-Atlantic urban corridor

everGREEN 

Strengthen Our Roots, Ensure Our Growth

what it is to be *ever*GREEN



✦ *exemplary* RESEARCH

The Arboretum recognizes the urgency of understanding biological processes at work in plants in an urbanizing environment. The Arboretum leads the Mid-Atlantic Megalopolis Project, a multi-state, multi-institutional effort, funded by the National Science Foundation, to digitize more than 700,000 herbarium specimens from 11 universities, state agencies, arboreta, museums, and botanical gardens in the northern corridor from New York to Washington, D.C. The resulting data will lead to unique opportunities to study the impacts of urbanization on mid-Atlantic flora.

exemplary OUTREACH ✦

For school field trips, few destinations can rival the lasting impact of a visit to the Arboretum. And for children with little access to green spaces and scarce resources in their schools and communities, the Arboretum can be pure magic. New efforts to provide free access—including transportation and materials to visiting Title I school groups and Explorar—the Arboretum’s signature summer youth outreach program for underserved children grades 6-9—help to extend the Arboretum’s resources to children from across the region who might otherwise have limited access to the kinds of experiences the Arboretum offers.



✦ *exemplary* EXPERIENCES

The Arboretum’s Natural Lands—including the woodlands, wetlands, riparian areas, and meadows—comprise more than 40 acres of the Arboretum. These areas serve as exhibits and models for sustainable care and wise use of these kinds of habitats in urbanized areas. This unique ecosystem includes a diverse collection of native plant species and a variety of native animals including fox, turtles, frogs, fish, and innumerable species of migrating birds.

Meet our Staff - Alison Thornton *Senior Associate Director of Development*

What brought you to the Arboretum?

During my time as a student at Temple University where I earned a BS in Horticulture, I had a number of experiences that led me to my current role as Senior Associate Director of Development. I was the Planning and Design Intern at Longwood Gardens, and there I had unique opportunities to see the inner workings of public garden administration. I found it energizing to see individuals from many work units come together to meet a goal, and I knew I wanted to serve on a team where I could be one of the players. I enjoy hands-on horticulture, but I wanted my professional work to focus on the people. While I was still a student, I also interned in the development office at Temple University Ambler. I had found a career path that could link my love of horticulture with my desire to connect with people who share this interest! When I was nearing graduation, the stars aligned and I was hired by the Morris Arboretum to coordinate *Moonlight & Roses* and provide general support to the Development Office. I feel so fortunate that my role within the organization has been able to grow as the Arboretum has grown over the years.



Photo: Susan Crane

What is your favorite part of the job?

The people—I feel so privileged to know so many wonderful people through my role at the Arboretum. Early in my career I had the pleasure of meeting the late horticulture volunteer, Loretta Seidl. She fought cancer for many years while she was a volunteer, and during the weeks when she did not have the physical strength to work, her fellow volunteers would set-up a lawn chair so she did not miss out on the social time and camaraderie each Wednesday morning. Her sharing this story affirmed for me that the Morris Arboretum is made up of a very special group of people.

What is your favorite event?

My favorite event of the year is our annual Plant Sale. It is like the Arboretum’s version of Homecoming. Staff, volunteers, members, and friends all come together to prepare for the growing season. It’s social. It’s celebratory. This recent Plant Sale was my 16th! In 2003, I had my first day of work with the Morris Arboretum during the Plant Sale, so it is always a special anniversary for me.

New Membership Cards

The Morris Arboretum has adopted new software that enables us to scan your membership card at the front entrance gate and in the Shop. With this change, new membership cards have been issued to our members that joined or renewed before the new cards were implemented. If you have not received new cards or have any questions, please contact the Membership Office directly at members@morrisarboretum.org or (215) 247-5777 ext. 205, Monday-Friday, 9am-5pm.

Also, during the summer months many take to the road and travel near and far to visit other gardens. As a member of the Morris Arboretum, you receive reciprocal admission benefits to more than 300 gardens across North America through the American Horticultural Society’s Reciprocal Admissions Program. To learn more, visit www.ahsgardening.org/gardening-programs/rap or purchase a printed directory in the Shop at the Morris Arboretum.



Photo: Paul W. Meyer

To learn more about Ever Green, please contact Mira Zergani, Director of Development at (215) 247-5777 ext. 102 or mzergani@upenn.edu. Visit bit.ly/morrisevergreen for more information.

Summer Classes

Summer classes are in full swing! Learn a new skill, broaden your horizon, and keep your mind engaged. We have something for every interest and age group. For a complete course brochure visit <https://online.morrisarboretum.org/classes>, or call (215) 247-5777, ext. 125.

Yoga in the Garden - Ten Enchanted Evenings

Ten Tuesdays: May 22, 29, June 5, 12, 19, 26, July 10, 17, 24, 31, 7:00-8:15pm

Members: \$180 for 10 sessions, \$100 for five Non-members: \$200 for 10 sessions, \$120 for five Walk-ins for single session: \$25, cash or check only

The incredible beauty of summer nights at the Arboretum provides the backdrop for this unique opportunity to learn the basics of yoga: breathing, mindfulness meditation, balance, strength, flexibility, core awareness, and deep relaxation surrounded by the garden’s peaceful ambiance. All are welcome, including beginners. **Please bring a yoga mat and wear comfortable clothes. Refunds will only be given five business days before the first session of the course. No class or attendee substitutions are permitted. Meet at the Visitor Center.**



Birding at the Arboretum: A Local Hotspot

Session 4 (Nesting Birds)

Tuesday, June 5, 8:00-10:00am

Members: \$25, Non-members: \$30

Join birding expert Ruth Pfeffer to explore some of the hotspots for birds at the Morris Arboretum. The natural areas including wetlands, meadows, and the woodlands along the Wissahickon Creek provide great habitat for a wide variety of birds year-round. We will see resident birds as well as migrating raptors, sparrows, and warblers. **This session is for beginning or experienced bird watchers. Bring binoculars. Park in the meadow next to the Arboretum entrance kiosk and meet Ruth there.**



Digital Photography: A Perspective for Beginners

Saturday, June 16, 9:30am-12:00pm

Members: \$54, Non-members: \$60

This example-driven class provides understandable and useful information to create images for framing, teaching, and personal enjoyment. We will focus on considerations of prevailing light, elements of photographic composition, and developing your personal style. The class consists of one hour of classroom lecture, one hour of shooting outdoors, and a final hour for an open class review of selected class images. **While this class is intended for beginning photographers, students MUST know how to operate their personal cameras. Students should also bring a personal device to download images for class review (e.g. laptop, tablet, etc.).**

Planting a Miniature Hosta Container

Saturday, June 16, 10:00am-12:00pm

Members: \$60, Non-members: \$65

Enjoy planting your own colorful and long-lasting container garden using specially selected miniature hostas. These hostas can have the same great characteristics as larger hostas, but their tiny size makes them more versatile. Learn how to design and maintain a small garden, then plant your own unique container, perfect for a shady patio or back porch. **We will meet in the barn at Bloomfield Farm. Look for the paved road across from the main public garden entrance on Northwestern Avenue. Park in the lot and look for the red barn on your left.**

Leaf Casting in Concrete

Saturday July 14, 10:00am-12:00pm

Members: \$50, Non-members: \$55

A piece of sculpture adds a whimsical accent to any garden. Learn how to turn a live leaf into stone and add year-round interest to that perfect nook in your garden during this two-hour workshop. Concrete leaves make great bird baths, stepping stones, or even wall art. Bring your favorite leaf—perhaps a hosta, rhubarb, or magnolia. If you don’t have access to leaves, we will have several available. Fee includes all materials to make one large or two small leaf sculptures. **Dress for getting messy. We will meet in the barn at Bloomfield Farm. Look for the paved road across Northwestern Avenue from the public garden entrance. Park in the lot and look for the red barn on your left.**

Photos: Robert Gutowski, Tiffany Stahl, and Arnold Winkler



More Summer Fun - Classes for Kids!



Art Explorations in Nature (Ages 3–5)

Four Thursdays, July 5, 12, 19, 26, 1:00-3:00pm

Members: \$85, Non-members: \$100

Encourage your child to engage with the outdoors through discovery and creativity in this four-week art series. We will observe the natural world, find joy in the process, and create nature-inspired art. From painting to printing to constructing, children will experiment with a variety of natural materials to develop self-expression and fine motor skills. Each session will include a brief exploration of the Arboretum, a story or introduction to the weekly theme, and time for making their own art. Parents are welcome, but do not have to stay.

Family Overnight at Bloomfield Farm

Friday, June 15 to Saturday, June 16, arrive after dinner at 6:00pm

Friday, Depart by 10:30am Saturday

Members: \$80, Non-members: \$90

Enjoy an overnight getaway with family and friends at Morris Arboretum’s Bloomfield Farm. Arrive after dinner or with a picnic on Friday evening (no cooking please). Bring all that you need for camping: tent, sleeping bag and pad, flash light, folding chair, camp stories, etc. Pitch your tent by historic Springfield Mills, enjoy a communal camp fire, and toast marshmallows. There will be an evening nature walk led by Arboretum staff. Fireflies are expected in the meadows. Take a break from your routine without going far from home. On Saturday morning, breakfast will be provided. You may want to bring your binoculars. **The price is per tent with a limit of four people per tent. Registration is limited to ten tents. Bloomfield Farm is located on East Northwestern Avenue directly opposite from the Morris Arboretum’s public garden entrance.**



Moonlight & Roses

June 8, 2018

It's not too late to reserve a space at the most popular garden party of the year! *Moonlight & Roses*, Morris Arboretum's annual fundraising gala, begins with cocktails and hors d'oeuvres in the Rose Garden at 6pm, followed by dinner and dancing in the fabulous moonlit tent. The Morris Arboretum is delighted to recognize longtime friend and supporter Maysie Starr as the 2018 *Moonlight & Roses* honoree. Amanda Cobb and Sarah Salmon are co-chairing this year's event, which takes place on Friday, June 8, 2018. Reservations are required and space is very limited. For more information and to register, visit www.morrisarboretumgala.org no later than May 25.



Photo: Mark Stehle

Garden Railway Celebrates 20th Anniversary

Morris Arboretum's Garden Railway opens for the summer season on Saturday, May 26, Memorial Day weekend. This year marks the 20th anniversary of the exhibit and the 2018 theme, appropriately, is *Time in the Garden*. Come and see a Grandfather 'Mouse' Clock reminiscent of the kids nurse rhyme "Hickory, Dickory, Dock," delight in finding a Giant Rabbit with a Watch Fob who is late to return to the book *Alice in Wonderland*, and discover an hourglass sculpture, a sundial, and many other time-related creations. A miniature world with a quarter-mile track running through it, the Garden Railway features loops and tunnels, bridges and trestles and miniature buildings that are all created entirely of natural materials, each meticulously detailed with leaves, bark, vines, and twigs. The trains will be open daily through Labor Day, Monday, September 3, and then on weekends only through Monday, October 8.

The Garden Railway is supported in part, through the generosity of Gwen and Ed Asplundh and by a gift given in memory of Joe Shuttleworth.



Photo: Marie Ingegneri

Morris Arboretum Lecture Series

Lectures are \$15 for members and \$20 for non-members. To register, visit morrisarboretum.org/classes or call (215) 247-5777 ext. 125

What a Warming World Means for Pest Outbreaks

Wednesday, October 10 at 2pm

How does global warming affect us and other creatures on earth? Join internationally recognized expert Mike Raupp as he reviews evidence for and possible causes of climate change. See how warmer temperatures alter the geographic ranges of insect pests, their seasonal life cycles, and interactions among plants, animals that eat plants, and their natural enemies. Learn about invasive species and urban heat islands. An entomology professor at the University of Maryland and Science Channel Expert, Mike has more than 250 publications and has made more than 1,200 presentations on the ecology and management of insects and mites. His most recent book, *26 Things that Bug Me* introduces youngsters to the wonders of insects and natural history, while *Managing Insect and Mites on Woody Landscape Plants* is a standard for the arboricultural industry.

The Lukens Endowed Lecture is presented annually in memory of educator and Arboretum volunteer Byron Lukens and his wife, Elizabeth.



The Living Legacy of George Nakashima

Wednesday, November 7 at 2pm

Born in 1905, George Nakashima was an American woodworker, architect, and furniture maker based in nearby New Hope, Pennsylvania. He was a leader in 20th century furniture design and one of the fathers of the American craft movement. Since his death, his daughter, Mira Nakashima, has continued to define her father's legacy. In this lecture, Mira will provide an overview of George Nakashima's life before woodworking, and discuss the processes involved in envisioning and creating a piece of furniture. Mira was born in Seattle, Washington in 1942, incarcerated with her family at Minidoka on the Idaho Desert, and moved to New Hope in 1943. She graduated from Harvard University and received a Master's degree in Architecture from Waseda University in Tokyo.

The Barnes Endowed Lecture is presented annually in memory of Laura L. Barnes, founder of The Barnes Foundation Arboretum. This lecture will be held at the Ambler Theater, 108 E. Butler, Ave., Ambler, PA. The cost is \$15 for members and \$20 for non-members.

The National Arboretum's Impact on the American Landscape (rescheduled from March 2018)

Wednesday, December 5 at 2pm

Join us for an engaging lecture with Dr. Richard Olsen, Director of the U.S. National Arboretum. One of the world's premier woody plant research facilities and public gardens, the National Arboretum has developed superior plants through genetic improvement, evaluation, and selection, thereby contributing to diverse and sustainable American landscapes. Learn about its valuable collections, its important collaborations with peers such as Morris Arboretum, and how exciting new ventures will continue to expand the relevance and impact of the National Arboretum.

The Klein Endowed Lecture is presented annually in memory of Dr. William M. Klein who served as the Arboretum's first full-time director from 1977-1990.





Joan & Stanley Root – A Story of Family

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

Since its founding by siblings John and Lydia Morris, one of the Morris Arboretum’s greatest strengths is that it is a place where families like to gather. While in the garden, you might see a young mother walking with her baby in a stroller, parents playing hide & seek with their children in the Metasequoia grove, or a grandparent birdwatching with their grandchildren in the wetlands. Special Arboretum events throughout the year—whether it is the annual Fall Festival, the Holiday Garden Railway, Arbor Day, or the Plant Sale weekend—offer families opportunities to create traditions and enjoy “the beautiful land of life” together.

“Rejoice with your family in the beautiful land of life.”

~ Albert Einstein

Joan and Stanley Root were among the many Morris Arboretum members who, during the course of thirty years, nurtured their family through time together in the garden. When their son, Walter, died unexpectedly, they created a living legacy in his memory through the establishment of the Walter J. Root Arborist Intern Endowment. Through this gift, more than three dozen young women and men have served as arboriculture interns and received graduate horticulture education as part of their Morris Arboretum internship. In turn, the Roots gained a whole new “family by affection” as Joan and Stanley made a point of befriending each Root Arborist Intern at the beginning of each academic year.

As they moved into their retirement years, the Roots also invited their adult children—daughter Louise and son Henry—to become acquainted with the Root interns. When Stanley died in the summer of 2015, Louise and Henry made sure to continue the family tradition of trips to the Arboretum with Joan where they would enjoy the presentation by the current Root intern, followed by a meal together, and a cart tour through the garden.

The Morris Arboretum community was deeply saddened to learn of Joan Schimpf Root’s death in January of 2018. However, as the Arboretum community mourns the passing of both Stanley and Joan, we continue to celebrate their remarkable lives—as Arboretum friends, volunteers, and family to generations of Arboretum members, staff, and students. And we rejoice that their devotion to the Morris Arboretum lives on through the Walter J. Root Arborist Intern Endowment, and through their children and grandchildren: Louise, Scott, Scott Jr., and George Melby, and Henry, Marilyn, Christopher, and Sterling Root.

Tributes & Memorial Gifts

The Morris Arboretum is grateful to the following individuals who made tribute and memorial gifts between November 1, 2017 and March 31, 2018.

In honor of Lee Laden
Drew Laden

In memory of Elizabeth “Betty” Adair
Cathie & John Hoban

In memory of Mac Borie
Annette B. Congdon

In memory of Mary Disston
Martha Ballard
Emilie R. Bregy
Barbara & Richard Catlett
Debra L. Rodgers & Paul W. Meyer
Suzanne Steigerwalt
Ella Torrey

In memory of Harold and Eleanor Greenwald
Philip Greenwald

In memory of George Heimbach
Anonymous

In memory of Christopher M. Kroger
Eugenia Warnock & Joseph Siedlarz

In memory of Lucille Roland
Sharon & J. Christopher Miller

In memory of Joan S. Root
Mary S. Ashmead
Bethesda Country Club Blue A Team
John K. Binswanger
Earle K. Borman Jr.
Emilie R. Bregy
Elizabeth & Henry S. Cecil
Madelyn Elaine Curtin
Samuel S. M. DuBois
Susan & Robert Emmer
Margaret W. Everson
Felice Fischer
Nancy & William Giles
Hannah L. Henderson
Sandra A. Horrocks
Ruth & Richard Howarth
Thomas Hyndman
Sally R. Johnston
Victoria Le Vine
M.J. & Frank Loughran
Marianne & William Mebane
Jean & Edward Melby
Monica & Jeffrey Melby

Sondra & Daryl Nickel
Sarah H. Norris
Ruth Van Sciver Peckmann
Terese & Thomas Platten
Debra L. Rodgers & Paul W. Meyer
Dorothy & Edwin Sheffield
Barbara & Jay L. Swallen
Linda & Greg Vaniscak
Christine J. Washington
Leslie & Stephen Weisser

In memory of Lew and Betty Somers
Beth Somers Stutzman

In memory of Fred Wietecha
Melissa Starkey



summer events

JUNE

Early Bird Openings
Saturdays & Sundays, 8am

Start your day with an early morning visit to Morris Arboretum. The garden opens at 8am Saturdays and Sundays from May-September. Members, non-members, walkers, amateur photographers, birders, and everyone in between are invited to find the shining dew on more than 12,000 labeled plants in the Arboretum’s living collection.

Storytime at the Arboretum
Friday, June 1, 10:30-11:15am

Join us for fun and engaging reading sessions with local librarians. Each session is tailored to the changing seasons and complements the natural setting of the Arboretum. Storytime is held outdoors in nice weather, at the Outdoor Children’s Classroom, next to the Widener Visitor Center. In the case of inclement weather, Storytime is held in the side tent or classroom at the Visitor Center.

Nature Play
Saturday, June 2, 11am-3pm

Climb on fallen tree trunks. Jump from stump to stump. Nature play is unstructured fun using what’s available; learning to love nature and loving to learn naturally. This session will take place below the end of the Oak Allée, past the *Three Tubes* sculpture.

Saturday Morning Live Tour
Saturday, June 2, 11am

Join an experienced guide for a featured tour of the month. Tours begin at the Widener Visitor Center. This month’s tour will discover Hidden Gems at the Morris Arboretum.

The Sonnets of Shakespeare
presented by Darrel Walters
Wednesday, June 6, 7pm

Join author and retired educator Dr. Darrrel Walters for a revealing exploration of Shakespeare. This presentation will highlight the bard’s elegant and surprising use of language. A selection of his sonnets will also be read in a way that listeners are sure to understand and appreciate.

Moonlight & Roses
Friday, June 8, 6pm – 11pm

See page 17 for more information.

Dogs and Barks Tour
Saturdays, June 9 & 23, 11am

The tour title refers to the beautiful dogwood tree and tree bark. The tour features some common and not-so-common dogwood species, with their barks that aid in distinguishing one from another. There are also many other trees such as shagbark hickory, paperbark maple, and pitch pine with such striking bark formations that they provide year-round interest. Additionally, 2018 is the Chinese Year of the Dog, making this a perfect time for this tour.

Grist Mill Demonstration Day at Bloomfield Farm
Sunday, June 17, 1-4pm

Historic Springfield Mills at Morris Arboretum is restored and stone-grinding corn for meal and flour. Come and explore revolutionary technology, local history, and a beautiful setting along the Wissahickon Creek. Guided tours.

Photo:s Bob Gutowski, Beth Miner and Debra Schiff



Summer Solstice Celebration
Thursday, June 21, 6am

Welcome summer by gathering at the *Time in the Garden* sundial exhibit in the Azalea Meadow to experience the marking of the solstice at 6am. Bring your mat and stay afterward for an hour of yoga and meditation suitable for the whole family. Extra mats will be available for those without. Members only; pre-registration required.

Circus Week at the Garden Railway
Saturday, June 30 through Sunday, July 8

Listen for the call of the ringmaster as you watch the colorful railroad cars bring the “Big Top” to the garden.

JULY

Early Bird Openings
Saturdays & Sundays, 8am

See June for details.

Late Night Wednesdays
Wednesdays, 10am-8pm

See June for details.

Storytime at the Arboretum
Friday, July 6, 10:30-11:15am

See June 1 for more information.

Circus Week at the Garden Railway
Saturday, June 30 through Sunday, July 8

See June 30 for more information.

Nature Play
Saturday, July 7, 11am-3pm

See June 2 for more information. This session will take place below the Oak Allée, past the *Three Tubes* sculpture.

Saturday Morning Live Tour
Saturday, July 7, 11am

Join an experienced guide for a featured tour of the month. Tours begin at Widener Visitor Center. This month’s tour will discover Great Trees at the Morris Arboretum.

Thomas the Tank Engine & Friends at the Garden Railway
Saturday, July 14 & Sunday, July 15

Look for your favorite train characters among the whole steam engine gang from Sodor as they take over the railway for the weekend.

Grist Mill Demonstration Day at Bloomfield Farm
Sunday, July 15, 1-4pm

See June 17 for more information.

Commonwealth Classic Theatre presents *The Complete History of America (abridged)*
Wednesday, July 18, 6:30pm

Adam Long, Reed Martin and Austin Tichenor, the same comic team that staged *The Compleat Works of Shakespeare (abridged)* return with this new production.

AUGUST

Early Bird Openings
Saturdays & Sundays, 8am

See June for details.

Late Night Wednesdays
Wednesdays, 10am-8pm

See June for details.

Storytime at the Arboretum
Friday, August 3, 10:30-11:15am

See June 1 for more information.

Nature Play
Saturday, August 4, 11am-3pm

See June 2 for more information. Build shelters with branches. Weave baskets with vines. See what’s wriggling under stumps. This session will take place at the lower entrance to the woodland trail, above the wetlands. You may park in the meadow by the kiosk or walk down from the café.

Saturday Morning Live Tour
Saturday, August 4, 11am

Join an experienced guide for a featured tour of the month. Tours begin at Widener Visitor Center. This month’s tour will discover Water Features at the Morris Arboretum.

Thomas the Tank Engine & Friends at the Garden Railway
Saturday, August 11 & Sunday, August 12

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

Grist Mill Demonstration Day at Bloomfield Farm
Sunday, August 19, 1-4pm

See June 17 for more information.

SEPTEMBER

Early Bird Openings
Saturdays & Sundays, 8am

See June for details.

Nature Play
Saturday, September 1, 11am-3pm

See June 2 for more information. Splash in water and see what floats. Look for seeds and pods of all kinds. This session will take place at the upper entrance to the Oak Allée.

Saturday Morning Live Tour
Saturday, September 1, 11am

Join an experienced guide for a featured tour of the month. Tours begin at Widener Visitor Center. This month’s tour will discover Hidden Gems at the Morris Arboretum.

Thomas the Tank Engine & Friends Garden Railway
Saturday, September 8 & Sunday, September 9

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

Dogs and Barks Tour
Saturdays, September 8 & 22, 11am

See June 9 for more information.

Grist Mill Demonstration Day at Bloomfield Farm
Sunday, September 16, 1-4pm

See June 17 for more information.

Autumnal Equinox
Saturday, Sept 22, 12pm

Join us for a short yoga practice in the garden to celebrate the autumnal equinox. Led by an instructor from Balance Chestnut Hill, this is a great activity for old and young alike and is especially geared toward grandparents and their grandchildren.



ADMISSION

Adults (18 - 64yrs.)	\$19
Senior (65+yrs.)	\$17
Children (3 - 17yrs.)	\$10
Members	FREE

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

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



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

Did You Know About Extended Hours this Summer?

Early Bird Saturdays and Sundays – Garden opens at 8am (May – Sept.)

Through September, take your wake-up walk at Morris Arboretum. Relish the quiet of the garden as the new day begins and sunlight filters through the trees. Watch as more than 12,000 labeled plants in the Arboretum's living collection slowly greet the morning and search for the sun. Observe birds as they take flight and begin their hunt for nourishment. Capture and savor the beauty of first light digitally or with your naked eye. Please note, the Garden Railway will open at 10am on Early Bird Saturdays and Sundays.

Late Night Wednesdays – Garden open until 8pm (June – August)

Summer evenings are special at Morris Arboretum. Escape the heat of the day and experience the cooling power of trees. Enjoy the evening garden light and watch the sun slowly tuck itself away for the night. Pack a picnic dinner, take a stroll, or just delight in the sounds of chirping crickets and the magical lighting of the fireflies.

Photos: Paul W. Meyer

