

VOLUNTEER

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Morris Arboretum
UNIVERSITY of PENNSYLVANIA

Official arboretum of the Commonwealth of Pennsylvania

Volunteer

Morris Arboretum of the University of Pennsylvania

Volunteer is a newsletter published monthly for
Arboretum volunteers.

The Morris Arboretum of the University of Pennsylvania is an historic public garden and educational institution. It promotes an understanding of the relationship between plants, people, and place through programs that integrate science, art, and the humanities. The Arboretum conducts four major activities: education, research, outreach, and horticultural display. As the official Arboretum of the Commonwealth of Pennsylvania, the Morris Arboretum of the University of Pennsylvania provides research and outreach services to state agencies, community institutions and to citizens of Pennsylvania and beyond.

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Volunteer

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Photos: Claire Sundquist, unless otherwise stated



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Letter from the Editor

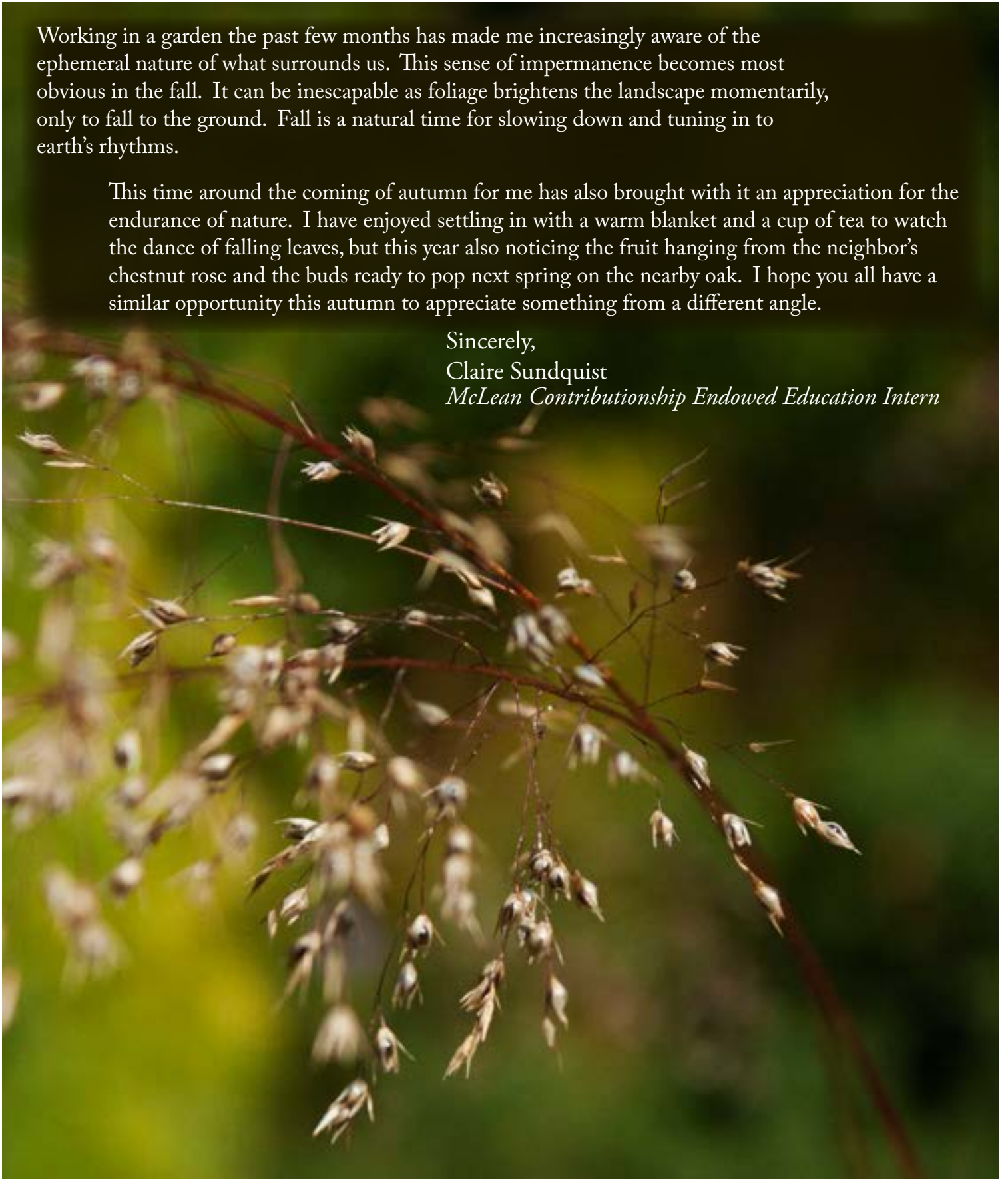
Working in a garden the past few months has made me increasingly aware of the ephemeral nature of what surrounds us. This sense of impermanence becomes most obvious in the fall. It can be inescapable as foliage brightens the landscape momentarily, only to fall to the ground. Fall is a natural time for slowing down and tuning in to earth's rhythms.

This time around the coming of autumn for me has also brought with it an appreciation for the endurance of nature. I have enjoyed settling in with a warm blanket and a cup of tea to watch the dance of falling leaves, but this year also noticing the fruit hanging from the neighbor's chestnut rose and the buds ready to pop next spring on the nearby oak. I hope you all have a similar opportunity this autumn to appreciate something from a different angle.

Sincerely,

Claire Sundquist

McLean Contributionship Endowed Education Intern



Notes from the Guides Chair

Hello all,

Have you ever noticed we don't seem to learn from history? James Madison noted in the early 1800's that our agricultural practices were leading to an "exhausted country." In fact, members of his family were leaving Virginia to farm elsewhere because the land was being depleted. I learned about this in an excellent book by Andrea Wulf called *Founding Gardeners*. She is also the author of *The Brother Gardeners*, a historical account of John Bartram and the plant/seed exchanges in colonial America.

Founding Gardeners is based on the lives of Washington, Adams, Jefferson and Madison. These four men were first and foremost farmers but none had a bigger impact on agriculture than Madison. He was elected president of the Albemarle Society (an agricultural society in Virginia). In May 1818, Madison rode from Montpelier to Charlottesville for a society meeting. He was to deliver a speech that would make him one of the most respected farmers in America and would place him at the forefront of forest and soil conservation (decades before a concerted effort was made to preserve America's nature).

This speech was the compilation of all that he had learned from reading the most progressive agricultural publications over the previous decades. He wanted to put an end to the destruction of once fertile soil and the increasing exploitation of timber resources. He stressed the delicate balance between man and nature. Madison was the first to weave together a myriad of theories from different areas, combining political ideology, soil chemistry, ecology, and plant physiology into one comprehensive idea. He brought into his speech Thomas Malthus's theories on population growth, Humphry Davy's writings on agricultural chemistry, Joseph Priestley's discovery of oxygen and Jan Ingenhousz's understanding of plant respiration. Madison felt nature was not subservient to the use of man. Madison's thoughts on nature's balance and ecology are all but forgotten but at the time his approach was radically new.

More than thirty wealthy landowners and progressive farmers listened when Madison spoke about soil erosion and the devastating affect of ploughing "up and down hilly land." He also underlined the importance of irrigation and highlighted the need to restore the depleted soils using manure and plaster of paris. He stated that man needed to return what he took from the soil. He ended his speech with what he thought was man's most calamitous error: "the excessive destruction of timber." What was left of the woodlands needed to be restored and what had been taken, had to be replanted.

Over the next year every enlightened farmer in the United States of America read Madison's address to the Agricultural Society of Albemarle and dozens of letters arrived at Montpelier from across the US and Europe. A London bookseller wanted to publish the speech, it was forwarded to John Sinclair, the former president of the British Board of Agriculture, and it was also deposited at the library of the American Philosophical Society in Philadelphia. If we learned from history, I feel the dust bowl need not have happened. But we tend to forget what doesn't support what we want to do today. I hope you will give this book a try, you will learn a lot about our founding gardeners.



Happy Gardening!

Jody Sprague
Chair of the Guides

Education News

There is still time to register for these great October classes!

Discover the Water Features at the Morris Arboretum

with Robert Anderson, Retired Director of Physical Facilities, Morris Arboretum

Thursday, October 2 | 1-3pm

Join Bob Anderson in a talk and walk through the garden as he describes the engineering of many of the early 20th century fountains and waterfalls that were so important to John and Lydia Morris's design.

Volunteer Price: \$12.50



Flashy Plants for Outstanding Fall Color

with Kerry Mendez, Garden Designer, Author, and Owner of Perennially Yours

Friday, October 10 | 10-11:30am

This information packed talk will introduce you to some great perennials, from chrysanthemums and asters, to alliums and anemones, as well as shrubs, annuals and bulbs that can carry the fall show in your garden. The lecture also includes some timely tips for jump starting gardens in the spring.

Volunteer Price: \$12.50

Photo courtesy Stephanie Kuniholm

To view full descriptions visit

<https://online.morrisarboretum.org/classes>

To register with a credit card call 215-247-5777, ext. 125.

Education News continued

More great October classes!

Sensory Landscape Design: Maximizing the Outdoor Experience *with Kevin Stephenson, Landscape Architect*

Thursday October 7 | 7-9pm

Visual design principles can be used to capture qualities of seasonal change, contrast, and composition can be applied to sound, wind, warmth, shade, and other outdoor experiences. Learn how to orchestrate the visual enjoyment of landscapes to include all of

Volunteer Price: \$12.50



Mapping and Site Analysis *with Vince Marrocco, Chief Horticulturist, Morris Arboretum*

Four Mondays, October 6, 13, 20, 27 | 7-9pm

To effectively landscape an area, you should first map and analyze your site. In this class we will complete a base map of an area to be landscaped. Sessions include lecture, practical hands-on applications, and final project critiques.

Volunteer Price: \$60

To view full descriptions visit

<https://online.morrisarboretum.org/classes>

To register with a credit card call 215-247-5777, ext. 125.

Save the Date!

Fall Volunteer Workshop:
Get the Dirt On Dirt!

Nancy Bosold, an expert in Turfgrass Management and Grounds Maintenance, will give tips on how to keep your soil healthy and the plants in it happy.

Tuesday, October 21st | 10:30am
Please meet in the Widener Classroom.

Join us for the Volunteer Field Trip to the
National Museum of Jewish American History



Tuesday, November 11th

Please park in the meadow. Vans will depart the Arboretum at 9:30am.

Tour at the museum will begin at 10:30am.

Sign-up is available through the Google calendar or email Lisa Bailey at
baileyl@upenn.edu.

Photo courtesy the National Museum of Jewish American History

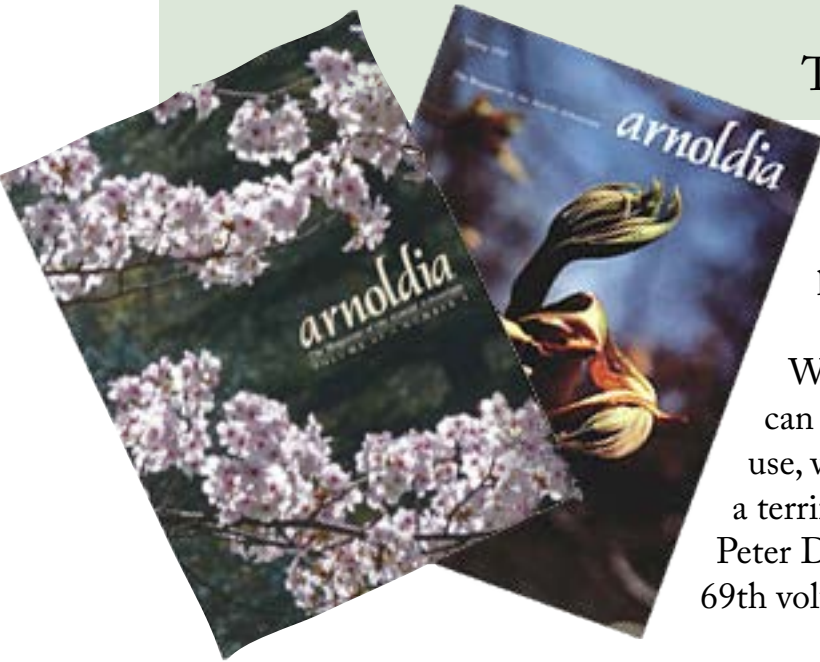
Arnoldia

The Magazine of the Arnold Arboretum

To anyone seeking authoritative plant information, Paul Meyer suggests bookmarking Arnoldia

<http://arnoldia.arboretum.harvard.edu/>.

While an annual subscription to the quarterly can be had for \$20, the online version is easy to use, with an index going back to 1915. There's even a terrific article about the history of the magazine by Peter Del Tredici from 2011, in the second issue of the 69th volume. Check it out!



From the Archive

The Japanese Tea House once stood in the woods of the Arboretum where we now have the outdoor classroom. This photograph was taken in 1937.

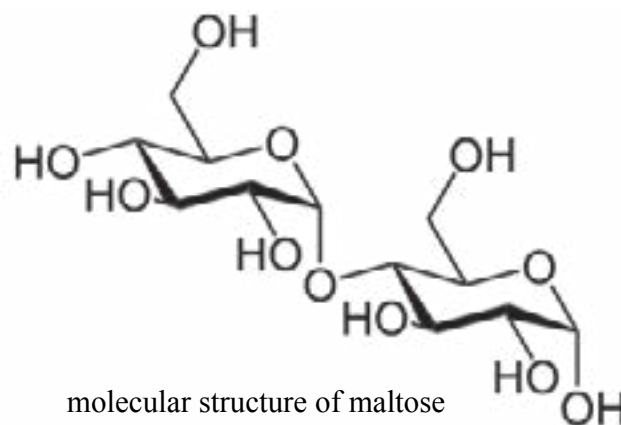


Katsura Chemistry



You may have noticed the scent of something sugary and familiar on a recent walk through the Arboretum. What is it? Cotton candy? Warm cinnamon buns? Or perhaps crème brûlée? Alas, it is not sweet treats from the cafe that you are smelling but rather *Cercidiphyllum japonicum*, a katsura tree.

The leaves of this tree contain maltose, the same compound that causes baked goods, caramel, and other desserts to smell so irresistible. Maltose is naturally found in a variety of plants, particularly in the bark of larch trees and in pine needles. Today synthetic maltose is used as a food additive to replicate the fragrance and taste of caramel, as well as to balance bitter notes in food and drinks such as coffee and beer.



Maltose is present in the leaves of the katsura year round, but production of the compound ramps up noticeably in late summer into early fall. As the leaves begin to turn yellow, eventually falling to the ground, the compound is released, left to drift in the breeze.

It is not yet known what the purpose, if any, the tree might have for releasing such an intriguing scent. Whether evolutionary advantage or luck of the draw, the candied scent has undoubtedly helped cultivate katsura lovers for generations.

Garden highlights:



Pennisetum alopecuroides
fountain grass
Widener



Cyclamen hederifolium
hardy cyclamen
above Sculpture Garden



Gomphrena 'Fireworks'
globe amaranth
Rose Garden



Koelreuteria paniculata 'Rose Lantern'
Rose Lantern paniced golden-rain-tree
Bloomfield Farm



Betula maximowicziana
monarch birch
Bloomfield Farm



Betula nigra
river birch
Wetland

Upcoming Events

October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Workday at Governor's Residence Great Plants Committee 10:30am	2	3	4 Discovery Series 11am-3pm Fall Festival
5 Fall Festival	6	7 Education Committee noon-1pm Guides Council 1:30pm	8	9	10	11 Mill Volunteer Work Day 9 am-3pm
12	13	14	15	16	17	18
19 Bloomfield Farm Day 12-3pm	20	21 Guide Workshop 10:30am-noon	22	23	24	25
26	27	28	29	30	31	

Weekly Volunteer Events

Wednesdays: Horticulture Volunteers 8am-noon

Saturdays and Sundays: Regular Tour 2pm-3pm

Saturdays and Sundays: Welcome Cart 11am-3pm

Upcoming Events

November

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Discovery Series 11am - 3pm
2	3	4 Guides Council Meeting 1:30pm	5	6	7	8 Mill Volunteer Work Day 9am-3pm
9	10	11 Volunteer Field Trip (see pg.5)	12	13	14	15
16 Mill Demonstra- tion Day 12- 3pm	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Weekly Volunteer Events

Wednesdays: Horticulture Volunteers 8-noon

Saturdays and Sundays: Regular Tour 2pm-3pm

Saturdays: Wellness Walks 10:30am