"Autumn...the year's last, loveliest smile."

his sentiment by early American poet William Cullen Bryant seems to perfectly capture the essence of fall's beauty.

One of the most abundant signs of autumn is the ever-popular flower, the chrysanthemum. "Mums create a colorful backdrop in festive shades of red, orange, yellow, peach and white," said Alyssa Hagarman, horticulture specialist. "Plus, they come in a variety of sizes. The smaller mums, in pots, can beautifully adorn your kitchen table, and the larger mums can be easily added to any landscape."

"There are three types of blooming mums: early bloomers, early fall bloomers and late fall bloomers," said Hagarman. "Early bloomers begin flowering in late July, early fall bloomers show off blooms in September and late fall bloomers start their colorful

Mums create a colorful backdrop in festive shades of red, orange, yellow, peach and white.

display in October. Each variety differs, but most mums will continue to bloom for four to eight weeks."

Chrysanthemum flowers look like they have a multitude of petals, but each individual petal is actually a small floret. "There are two different types of florets: ray and disc florets," added Hagarman. "Ray florets are what we traditionally see as the petals, while the disc florets create the center buttons. When the florets are clustered together,

they give us what we know and love as a mum bloom."

"If you live in a particularly cold area, it's a good idea to try and overwinter your mums," said Hagarman. "They can generally tolerate Pennsylvania winters, but if you live somewhere colder, or we have a really harsh winter, you may want to dig them up and bring them inside."

"Simply dig them up after the first fall frost, then place them in pots, making sure to include as much of the roots as possible," noted Hagarman. "Leave the foliage on the plants, water well and place in a cool and dark area inside."

"The plants will hibernate for the winter if you keep their roots damp," said Hagarman. "In the spring, introduce plants gradually to light and place them back in the garden after the last frost."



Visit Hershey Gardens this fall to see more than 1,800 colorful mums throughout the gardens, as well as other festive autumnal displays.

New Labyrinth and Meditation Circle Honors Beloved Gardener

The family of Marcus E. Sanford II and gardening staff create meaningful tributes in his memory

ow does Hershey Gardens grow? With a hardworking team of 10 to 20 garden-

"For many years, the whole gardening team took care of the 23 acres together," said Bill Kieffer, operations manager. "About ten years ago, we decided to give each gardener their own theme garden to care for. For example, one gardener oversees the Japanese Garden, while another gardener cares for the Herb Garden. This change created more 'pride of ownership' for staff, and they could better focus on the needs of that particular garden," said Kieffer.

In 2017, gardening staff member Marcus Sanford was overseeing the Rock Garden. "I think he chose that garden because he liked that it was at the farthest end of the garden, sort of off the beaten path," said Kieffer. "It features an interest-

ing collection of rocks, as well as mature evergreens, dogwoods, Japanese maples and holly trees."

In September 2017, Marcus unexpectedly passed away at age 39 from an underlying health condition. His parents, Robert and Cathy Sanford, were left grief-stricken. After a few months, they began to explore ways to create a memorial in his honor.



The labyrinth is an ancient symbol used for meditation and reflection. Users are encouraged to walk the path slowly, with a quiet mind.

"The Sanfords contacted us to explore what could be done as a tribute to Marcus at Hershey Gardens," said Kieffer. "We instantly thought of the Rock Garden and all the things Marcus would have enjoyed having in 'his' garden. They loved that idea." And so began two years of planning, creating and building.

"Before Marcus passed, he and I were

working through significant stormwater issues in the Rock Garden," said Kieffer. "So we started his memorial by finishing this project. We created a 100-yard swale east of the garden to redirect the water and then added a foot bridge."

The Sanfords and the gardening team continued working together to determine what else could be added to the gardens to best represent Marcus. "He was a quiet guy; he was calm and reserved," said Kieffer. They decided on a meditation circle near the Rock Garden in the Arboretum. "We chose that spot because it is the most tranquil part of the garden, and it connects to the new Arboretum Trail," said Kieffer.

Next, a 20-foot wide concrete labyrinth was added to the center of the Rock Garden. "The Sanfords loved the idea of guests quietly walking the path," said Kieffer. "It's been great watching guests use it, but it's also fun to see kids enjoy it as a maze. Either way, it's bringing joy to others and it honors the memory of Marcus."

"Marcus was a great guy; he was a friend to everyone," said Kieffer. "Creating these tributes in his memory was therapeutic for the whole team."

"I'm proud of what we've created in his garden," said Kieffer. "And I believe Marcus would be too."



The new meditation circle features 13 limestone rocks from the Lehigh Valley. Each rock is about 3 feet wide and weighs approximately 1,000 pounds.

10 Questions With...

Vera Kolstrom, Manager of Administration at Hershey Gardens

What is your role at Hershey Gardens?

I tend to many of the day-to-day operational details associated with the Gardens to ensure a positive and enjoyable experience for our guests. I also answer all the correspondence and inquiries, organize and conduct group tours, and supervise and train our volunteer tour guides. I am also the liaison to Hershey Gardens' advisory board.

What do you find most rewarding about your job?

I love working with our Volunteens in the summer and throughout the year. I enjoy interacting with them and find it very rewarding. It's nice to see the confidence they gain throughout the year.

How long have you worked at the Gardens?

I started at the Gardens in April 2018 as a visitor experience coordinator, which was a newly created part-time position. In August 2019, after some personnel changes, I transitioned to my current full-time role.

Can you tell us a little bit about yourself?

I am originally from Baltimore. In 1996, our family relocated to Hershey because of a career opportunity. Our son, Tim, lives in Denver and our daughter, Rebecca, lives in Sacramento. Fun places to visit! Only our goldendoodle, Watson, decided to stay home with me and my husband Keith.

What is your professional background?

Diverse! I was a liability claims adjuster for an insurance company for 10 years. After moving to Pennsylvania, I worked parttime as a preschool teacher, a substitute teacher, an insurance agent, and I did a lot of volunteering, especially with youth. Then I worked at the Milton S. Hershey Medical Center for 12 years in a variety of roles, including training and development coordinator, manager of a practice site and risk manager. The most meaningful role to me was patient relations manager for the Milton S. Hershey Medical Center and its clinics.

How has your background helped you in your current position at the Gardens?

I like to think that I've acquired a little pearl of wisdom with each endeavor, even though I didn't realize it at the time. I have been so lucky to work in jobs that



Vera volunteers with the Association of Faculty and Friends for Penn State Health and the College of Medicine, as well as Lion's Share, a community food drive.

have given me the opportunity to create, problem solve and teach. The lessons I've learned in past positions have helped me in my current role, and I continue to learn.

What do you enjoy most about your job?

I've been given the opportunity to work with talented and gifted people! It is such a joy engaging with colleagues and sharing ideas, thoughts and suggestions. I know I will get honest feedback and maybe even inspiration. Everyone is so committed to making Hershey Gardens the best it can be, and we're able to share our ideas and work together to make things happen.

Rumor has it that you have a wide variety of interests and hobbies, ranging from traveling to painter. Is this true?

It's true. I like to dabble in things! My pastime is filled with a variety of activities, including painting, gardening, bird watching, photography and reading. I also love to travel and visit new places, especially when I discover a museum, a garden, a beautiful view or learn something about a place or its people. I do like my sports teams, too – Penn State football (We Are!), Ravens football and Orioles baseball.

What has been your most memorable place to visit?

My most memorable experience was not visiting a place, but the journey itself. I took a solo road trip across the country, stopping at small towns and cities along the way and back. Some of the stops I planned, while others were on impulse. You learn a lot when you are by yourself for 5,000 miles in a car.

Do you have a favorite part of the Gardens?

I love the Historic Rose Garden in summer when the roses are in full bloom. The show of colors is spectacular. It's a joy to come to work every day and experience their beauty and vitality for four months out of the year. I have always had a soft spot for the Japanese Garden, too. When my kids were little, it was a "hideaway" where we read books. The Japanese Garden was also my mother's favorite spot. We had a bench placed there in her memory after she passed away.



The Historic Rose Garden ranks as Vera's favorite place at Hershey Gardens.

Butterflies and Beyond

MEET THE STARS INSIDE THE BUTTERFLY ATRIUM

Featured Plant: Vanilla Orchid

Vanilla planifolia



Most people know that chocolate comes from the cacao tree, but where does vanilla come from? "Vanilla comes from a plant as well but in this case it's not a tree, but an orchid," said Sadie Smith, former manager of Conservatory habitats. "Vanilla orchids are a vining and climbing orchid. They get very large and once established, they produce flowers, which last only one day. If the flower is pollinated, a vanilla pod will develop to maturity over eight to ten months."

Vanilla is one of the most expensive spices due to the nature of its pollination. "In its native habitat of Mexico, vanilla orchids are pollinated only by a small Melipone bee," said Smith. "Most vanilla is produced in Madagascar, Comoros and the Reunion Islands and must be hand pollinated, which is very labor intensive and drives up the cost of production, resulting in an expensive product."



In the Butterfly Atrium, two trellises are covered with vanilla orchids. "These plants were generously donated to us about eight months ago," said Smith. "They seem to be doing well in the Atrium's humid

climate. We started growing them in a pot, but as it climbs and grows, it will push out air roots that soak up moisture and cling to the surface much like tendrils."

"Our vanilla orchid has not flowered yet, but hopefully it will, as it becomes established in its new home," said Smith.

Featured Butterfly: Longwing

Heliconius



Longwing butterflies are distinguished by their small size and long wings. "All longwing butterflies belong to the genus *Heliconious*, but there are many species within this genus, all having different appearances," said Smith. "Some common longwings found in the Butterfly Atrium include the postman, zebra longwing, tiger longwing, sara longwing and many others."

Longwing butterflies have the unique ability to feed on pollen in addition to



nectar. "They use their proboscis to slurp up nectar, but will also dissolve pollen with digestive enzymes regurgitated through their proboscis," noted Smith. "The pollen is then ingested, which provides a valuable source of protein and nutrition."

This nutritional boost has an advantage—a longer lifespan. "Longwing butterflies can live for several months instead of the two- to four-week lifespan typical of most butterflies," said Smith. "Longwing butterflies are also reported to be intelligent with preferences for certain flowers and the ability to return to known food sources day after day."

In the Butterfly Atrium, longwing butterflies definitely have their favorite plants. "They are frequently covering the blue porterweed, and especially enjoy the firebush and lantana as well," said Smith.

Featured Insect: Jungle Nymph

Heteropteryyx dilatata

The Butterfly Atrium has recently had an abundance of new life! "Eighteen juvenile jungle nymphs have emerged from eggs collected last spring and summer," said Smith. "The jungle nymph eggs are about the size of a pencil eraser, which is quite large for an insect egg."



The adult jungle nymph is one the heaviest insects in the world. "When jungle nymphs are born, both the male and female look the same," said Smith. "As they grow, differences will appear based on gender. Adult male jungle nymphs are long, thin and brown, with the ability to fly; the adult females are bright green, wider and larger than the males and cannot fly."

The appearance of both the male and female makes good camouflage. "The males look like twigs and the females look like leaves," said Smith.

"Jungle nymphs are herbivores. In the Atrium, they are fed pyracantha, ivy and oak," said Smith. "They're native to the tropical jungles of Southeast Asia where they eat tropical plants such as guava and currant leaves."

"The jungle nymphs in the Butterfly Atrium are young and very small, blending into the leaves as they feed," said Smith. "It's a challenge to find them all!"



A Pansy for Your Thoughts

Extend the season with these resilient beauties

By Lois Miklas, Penn State Master Gardener Coordinator, Lancaster County and Retired Educator, The M.S. Hershey Foundation

he pansy's cheerful appearance and sweet, subtle scent belie its ability to survive spring freezes, fall cold snaps, and even mild winters. For those not familiar, the pansy flower has a distinctive asymmetrical five-petal arrangement. Some have lines radiating from the center of the flower and some have dark blotches resembling a face. From an original color palate of yellow and purple, pansies are now available in every color of the rainbow, and many feature multi-colored blooms. The blooms are also edible, if grown organically. Popular as both a bedding and container plant, pansies are actually perennials with biennial tendencies. They are usually treated as annuals, however.

Origin and History

The history of the pansy's rise from a hum-



ble wildflower to a floral favorite was analyzed by Swedish horticulturalist Veit Brecher Wittrock in *The Gardeners' Chronicle*, May 30, 1896. Wittrock noted that the

source of the modern pansy is cloaked in enough mystery that even Charles Darwin declined to cite its origin. Wittrock concluded that the pansy is descended from the wildflower Viola tricolor—today commonly known as Johnny jump up-and Viola lutea, or mountain pansy. Both wildflowers were cultivated in Europe from the 17th century on. Victorian gardeners took a great interest in these flowers and by the middle of the 19th century their crossbreeding efforts had yielded over 400 pansy hybrids. In addition to color variation, crossbreeding contributed to the pansy's hardiness. The botanical name of the modern pansy Viola × wittrockiana honors Wittrock as the plant's



historian. The "x" in the name denotes that the plant is a hybrid.

The common name "pansy" seems to be derived from the French word pensée, which means thought or remembrance. The flower has often been associated with reflection as is illustrated by Ophelia's line in Shakespeare's *Hamlet*, "And there is pansies, that's for thoughts." (*Hamlet* 4.5.176-177)

Pansies Through the Seasons

Pansies have endeared themselves to me because they are the first flowering plant that I can put on my front porch in the spring. They can survive outdoors about a month before the last frost-free date in your growing area.

The pansy's "Achilles heel" is summer heat. High temperatures cause them to become leggy and pale with few blooms. I usually dispose of pansies in the height of summer and replace them with heat-tolerant annuals, but pansies can be cut back and mulched in the summer to await cooler fall weather.

Though they are usually considered annuals, pansies also have biennial tendencies. In the warmer zones and micro-climates of Pennsylvania, they can be planted in beds in the fall, mulched with straw or evergreen boughs in the winter, and they will thrive and bloom in the spring. They are indeed a very resilient plant!

Containerized pansies can survive the winter if kept in a protected area. You may want to cover them in particularly harsh temperatures (below 25°F). Whether in a container or garden bed, hydrating pansies before

freezing weather will help keep them alive. Icicle® pansies are bred especially for cold temperatures.

Caring for Pansies

Beginning gardeners will find pansies easy to grow. They prefer well-drained soil, rich in organic matter, such as compost. They can be grown in full sun to part shade. If they are in a container, consider moving them from sun to part shade as the temperatures increase in the spring. Very few pests and diseases bother pansies. Slugs pose the greatest threat.

Pansies do not need intense applications of fertilizer but would benefit from a slow release fertilizer or application of a general fertilizer every few weeks, especially if they are grown in a container. Deadheading helps increase bloom.

Pansies are readily available at garden centers and can also be grown from seed. Seeds need to be started indoors 14 to 16 weeks before planting outdoors. My experiments growing pansies from seeds have yielded mixed results. One year my seed-grown pansies lasted particularly well into the summer, while another year they barely bloomed before the onslaught of summer heat.

I recommend giving in to the tempting displays of pansies when they appear at your local garden center. Enjoy the many color combinations and consider paring pansies with other cool-loving plants such as ornamental kale (*Brassica oleracea*) or sweet alyssum (*Lobularia maritima*). Every gardener dreams of extending the growing season, and planting pansies in the early spring and Icicle® pansies in the fall will do just that.



The Art of BONSAI

Onsai is a Japanese art form which uses cultivation techniques to create small trees in containers that mimic the shape and scale of full-size trees. This tradition dates back more than a thousand years.

The Japanese word "bonsai," means "plant in a container." Bonsai can be created from most perennial trees or shrubs that produce branches and can be cultivated to remain small through pot confinement. Some species are more popular as bonsai because they have special characteristics, such as small leaves or



needles, which make them better for the compact nature of bonsai.

See the Exhibit at Hershey Gardens

BONSAI: Living Art at Hershey Gardens

Wednesday, October 7 through Sunday, October 31 from 9 a.m. to 5 p.m. daily

Experience the living art of bonsai with this popular annual exhibit provided by the Susquehanna Bonsai Club.

The exhibit will be displayed in the Hoop House. Included in admission; members are free.

HOLIDAYS AT THE GARDENS

Hershey Gardens is decking the halls this Christmas season! Beginning Friday, November 13, the popular poinsettia tree will be featured in the Conservatory, as well as other festive touches throughout the building. Even the butterflies will be joining in on the holiday splendor, as the Atrium will be draped in lights and ornaments to celebrate the holiday season.



New this year, families can participate in the "Winter Garden Hunt." Simply pick up a free guide at admissions, then locate and identify specific animal "tracks" painted on the garden paths. Also, be sure to keep an eye out for special items along the way!



PumpkinGLów

October 24, 25, 31 and November 1 from 9 a.m. to 5 p.m.

Pumpkin Glow is being re-imagined this year! With new



extended hours, guests can enjoy Halloween-themed activities in a safe environment with social distancing in mind.

This year's Pumpkin Glow is during the daytime, but the GLOW must go on! Join us

inside the new "Glow House" to get your glow on with family-friendly jack-o-lanterns, scarecrows and other glowing Hal-

loween fun! Families can also enjoy more than 100 carved and painted pumpkins, a scavenger hunt, performances in the amphitheater, food trucks, puppet shows, and more! Plus, the Gardens will be decorated like you've never seen it before. Kids will receive a pre-filled bag of delicious Hershey candy, so put on your Halloween costume and come join the fun!



HERSHEY GARDEN

The indoor Butterfly Atrium will be open during Pumpkin Glow. All COVID-19 safety precautions will be in place in the Atrium and throughout the Gardens. Masks are required indoors and outdoors during Pumpkin Glow.

Included with admission; free for members. Special thanks to The Hershey Company for the generous donation of Hershey's candy.

Fulton Bank
Event Sponsor

Special thanks to our generous poinsettia tree donors:

Jack & Joan Bishop
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Joe & Dee Lewin Vincent Rudisill Lou & Ashie Santangelo Bill & Holly Simpson David Tacka

Nancy Zimmerman, In Memory of Richard Zimmerman



Spotted Lanternfly: Update



The Spotted Lanternfly, Lycorma delicatula, presents a significant threat to Pennsylvania agriculture, including the grape, tree-fruit, hardwood and nursery industries, which collectively are worth nearly \$18 billion to the state's economy.

The spotted lanternfly is an invasive planthopper native to China, India and Vietnam. It was first discovered in Pennsylvania in Berks County and has spread to other counties in the southeast portion of the Commonwealth. This insect has the potential to greatly impact agricultural crops such as grapes, hops and hardwoods.

What Is Being Done

Penn State University and Extension, United States Department of Agriculture (USDA), and PA Department of Agricul-

ture (PDA) have joined forces to control and contain the spread. Penn State University is leading the research efforts currently underway to answer questions we have about the insect's biology, pesticide studies, and the ability of the insect to adapt to the environment in Pennsylvania. USDA and PDA are actively treating locations where the spotted lanternfly has been reported.

How You Can Help

Spotted lanternflies go through five stages of growth after hatching from eggs. The first four stages are



called nymphs, which Spotted Lanternfly eggs are incapable of flight. The adult spotted lanternfly is a leafhopper with wings about 1" long. Adults have grey wings with black spots. When the spotted lanternfly opens its wings, it reveals a bright red underwing. Spotted lanternflies live through the winter only as eggs. Adults lay eggs in masses in the late fall on trees, under bark, posts, lawn furniture, cars, trailers, outdoor grills, and on many other surfaces.

If you find a spotted lanternfly or a suspicious looking



Spotted Lanternfly, immature (red)

egg mass in a municipality where it is not known to exist, you should try to collect it and put it into a container filled with alcohol (rubbing alcohol, hand sanitizer, etc.) to kill and preserve it, or at least take a good picture of it. Report your sighting online to the Pennsylvania Department of Agriculture or call Penn State Extension at 1-888-4BAD-FLY (1-888-422-3359). Your discovery could add additional municipalities to the quarantined area. If you find any life stage of spotted lanternfly in a municipality where it is already known to exist, you should try to destroy it.



Spotted Lanternfly, with wings closed



Although this year's Big Band & Blooms concert was cancelled due to the COVID-19 pandemic, we are incredibly grateful to our generous sponsors.









