

Behind-the-Scenes in the Bug Lab

by Dan Babbitt, Associate Director and Resident Bug Geek

isitors to the Butterfly Atrium are instantly drawn to the chrysalis cabinet. They are intrigued by the amazing diversity of colors and shapes that exist in butterfly pupae. Sometimes, they can even catch a glimpse of a butterfly emerging from its chrysalis.

Often times, guests will look past these jewel-like creatures, through the glass panels and into the room behind the chrysalis cabinet, where staff is often busy at work. The room they're looking at is the Bug Lab.

The Bug Lab's official name is the "USDA Inspected Containment and Receiving Room." This is a required room for any exotic arthropod (insects and their relatives) exhibit. It is specially designed to meet the regulations as required by the USDA. This means that all possible exits or hiding areas for bugs are sealed or screened; even the drains in the sink have special screens. All of the surfaces must be able to withstand a daily cleaning with bleach solu-



The "Common Morpho" butterfly emerges from its chrysalis.



In addition to the receiving area for butterfly pupae, the Bug Lab is also home to all the non-butterfly arthropods featured in the BugZone and Touch-a-Bug cart.

tion. These precautionary measures help ensure that no insects, parasites or microbes escape the lab. Having this specialized room also allows us to keep hundreds of different species of insects and their many-legged relatives.

So what is going on back there? One of the primary uses of the space is to receive the butterfly pupae—more than 300 per week—from butterfly farms around the world. We inspect them, and then prepare them for display and their big metamorphosis moment! The only access to the chrysalis cabinet is from the lab; this helps to ensure that any possible parasites don't escape into the exhibit. We also collect the adult butterflies in the lab before releasing them into the Atrium.

Some of the newest inhabitants of the Bug Lab are our non-butterfly arthropods that we use for the Touch-a-Bug cart and the BugZone, located inside the Atrium. Equipment in the lab helps regulate temperature and humidity in the individual arthropod enclosures. This allows us to keep and rear creatures from all over the world: desert, tropical and temperate species. We also have to rear, grow and store the food for all of these hungry mouths. We keep fruit, vegetables and plants for many of the herbivores and raise feeder insects like fruit flies and roaches for the carnivorous creatures.

The next time you visit the Butterfly Atrium, take a peek through the chrysalis cabinet. You may see staff inspecting chrysalids, feeding a scorpion, misting the walking sticks or washing the lab ware: all the necessary duties to keep our animals happy and healthy, so they can inspire and educate our guests.

10 Questions With...

Denise Frantz, Membership Specialist

We recently caught up with Denise Frantz, Membership Specialist for Hershey Gardens, The Hershey Story and Hershey Theatre. Here's what she had to say!

Tell us about your job.

Every day is different, which I love. I am responsible for all membership correspondence for Hershey Gardens, The Hershey Story Museum and Hershey Theatre. I also answer questions from existing or potential members, and handle all the contributions that are made to The M.S. Hershey Foundation. My job also entails some accounting, marketing and fundraising.

What do you see as the most important aspect of your job?

I think relationship building and good communication are the most important aspects of my job. Every phone call is an opportunity to interact with our members on a more personal level. I always enjoy our member receptions; it's great to finally meet our members and thank them for their support.

How long have you been with the Foundation?

I started with the Foundation in March 2014. This was my first full-time job back into the workforce after being a stay-athome mom for 12 years. I loved being home with my kids, but when I was ready to return to work, this job was the best position I could have asked for.

Speaking of your kids, I understand they were Hershey Story Museum "groupies" this past summer?

Yes! My 16-year-old daughter Ellen worked at The Hershey Story Museum this past summer and my 12-year-old son Ben was a volunteer in the Museum's Youth Past Master program. I'm thankful to work for an organization that kept my kids occupied this summer! It was fun to bring them to work with me, because we got to have lunch together.

How has your job evolved since you've been here?

The responsibilities have remained the same, but with the opening of the Conservatory last summer, I have a lot more memberships to process! When I started in 2014, we had about 850 Hershey Gardens



members. Since the addition of the Conservatory last summer, Gardens' memberships have exploded to nearly 1,800 members, and it continues to grow. It's wonderful that so many families and individuals enjoy the Gardens and now they can visit year 'round.

Word has it that you have a soft spot for the stained glass butterflies that are displayed in the Conservatory's Welcome Pavilion?

Yes, it's true. When I began, the capital campaign for the Conservatory had just gotten under way. One of my responsibilities was to correspond with the donors who purchased the stained glass butterflies that are hanging in the Welcome Pavilion.

I have always had a little soft spot for those beautiful works of art.

What is your favorite part of the Gardens?

I love the new Conservatory. It was amazing to see the construction and watch it come to life.

What is your favorite part of the job?

Meeting and interacting with our members; they're so supportive of the Gardens. I love getting phone calls from visitors the day after they've been to the Gardens and loved it so much that they want to become members. Often times, grandparents call to purchase a membership for their grandchildren who visited the Butterfly Atrium and want to come back often. Those kinds of calls make me proud to be working here.

Do you have a garden at home?

No garden at home, but some landscaped beds that I feel like I am constantly weeding! My grandparents had a wonderful garden that I remember fondly.

Favorite flower?

I love hydrangeas for their large, colorful blooms. A co-worker showed me how to dip the stems in boiling water, which will prevent wilting. It's a great tip to use when the stems get clogged with sap.

The Perfect Gift: a Hershey Gardens Membership!

Gift memberships can be mailed to you or directly to recipient.



Individual: \$50 One named individual

Dual: \$75

Two named individuals

Family/Grandfamily: \$100

Two named individuals living at the same address and their children or grandchildren under age 18

New! Flex: \$175

One named adult and up to four guests

Supporter: \$500

All Flex benefits, plus a Behind-the-Scenes

Order online at HersheyGardens.org.

Here's the Dirt on Growing Cool Season Vegetables

hen most people think of vegetables, they think of sun-ripened tomatoes and peppers. But why stop there? Your growing season can easily be extended into the colder winter months. Below is a list of vegetables and herbs that thrive in cooler temperatures. The varieties in red can be seen in Hershey Gardens' Hoop House this fall!

Plant these 4 to 6 weeks before last frost:

Kohlrabi Asparagus Leeks Broccoli Brussel sprouts Parsley Chives Radish Cilantro Rutabaga Collards Sage Shallots Garlic Horseradish Spinach Kale **Turnips**



Plant these 2 to 4 weeks before last frost:

Beets Lettuce
Carrots Mustard
Cabbage Onion
Cauliflower Parsnip
Celery Peas
Chard Potatoes
Endive Swiss chard

GROWING TIPS



Beets - Plant seeds 1-2 inches apart. Harvest is ready 7-8 weeks after planting. This root veggie has many varieties showcasing edible deep red, yellow or white bulbs.

Broccoli – Plant seeds 18 inches apart, allowing 85-100 days until harvest. Do not get developing heads wet when watering.



Brussel Sprouts – Start seeds indoors and then transplant outside 6-8 weeks later. Harvest sprouts from the bottom of the stalk when they reach about 1 inch.

Carrots – Plant seeds 3-4 inches apart in well-tilled, stone-free soil.



Cauliflower – This crop is a little more difficult to grow because it needs consistent 60-degree days for harvest. Start plants from plugs, which you can buy at a local garden center. Be patient.

Kale – Plant seeds 8-12 inches apart and one-half inch deep. Kale is ready to harvest when the leaves are about the size of your hand.

Lettuce – Seedlings can tolerate light frost and should be planted 4 inches apart and one-half inch deep. Harvest time depends on the type of lettuce planted. Consider planting chives or garlic as a pest barrier.

Parsley – A popular biennial plant with feather-like leaves. Plant seeds 6-8 inches apart; you should see sprouting after 3 weeks. When leaf stems have three segments, it is ready for harvest.



Peas- Plant seeds 2 inches apart and 1 inch deep. Peas are a vine and prefer a trellis to grow up. Keep peas well picked to encourage more pods to develop.

Radish – Plant seeds 12 inches apart and one-half inch deep. Radishes need full sun. This is a root crop with a quick germination to harvest rate.





Spinach – Plant seeds 12 inches apart and 1 inch deep. Spinach can survive in temperatures as low as 15 degrees. Harvest when they reach your desired size but beware of bitterness in larger leaves.

Swiss Chard - A great choice for beginning gardeners with bright colors ranging from yellow to bright pink. Seeds should be sown 2 inches apart. You can start chard off in pots and transplant to discourage slugs.





Turnips –Plant seeds 4-6 inches apart in and one-half inch deep. Within a month, you can enjoy their bright greens, and within a second month, you can eat the swollen roots.

Stunning Fall Trees

all is an absolutely beautiful time of year. The air cools and the bright colors of summer fade into the warm colors of reds, oranges and yellows. Whether you're looking for a beautiful addition to your landscape, or to provide food for wildlife, these deciduous trees are sure to be a perfect fit.



Sugar Maple (Acer saccharum) is one of the most loved shade trees in the country. It can grow to 75 feet in height and 40 to 50 feet in spread. Its leaves turn a beautiful kaleidoscope of fall colors, from yellow to orange, red and even burnt red, and sometimes these colors can occur all at once. Let's not forget the seed pods or "helicopters" we all remember playing with when we were young.



Sweet Gum (*Liquidamber styraciflua*) is another great shade tree, topping out at 75

feet tall and stretching out 40 to 50 feet at maturity. Its unique bark almost appears to have wings on the younger growth, giving the tree a knurled look. The seed pods have spikes that attract an assortment of small birds and animals. The star-shaped leaves of this tree go from a glossy, dark green to yellows, oranges, reds, and even purple in the fall.



The Ginkgo (Ginkgo biloba) tree is a living fossil. This tree dates back 270 million years with one-of-a-kind fan-shaped leaves that are a prize in any landscape. The tree can tolerate poor environments such as heat, air pollution, salt and confined spaces, which make it great for urban areas. Its fall color is spectacular; the bright, solid gold leaves are a show stopper and can be seen for miles around because it grows 25 to 50 feet tall. The fruit of this tree smells quite foul, but can be avoided by only planting a "male" tree in your yard.



Scarlet Oak (Quercus coccinea) provides a magnificent red color in the fall and holds its leaves well into the winter months. This tree tops out at 60 to 80 feet tall and 40 to 50 feet in spread. Scarlet oak trees also provide food for wildlife with its acorns. It is tolerant of poor growing conditions and will also withstand high winds.



Sourwood (Oxydendrum arboretum) is a native tree that has many great qualities. This tree flowers in the early summer with fragrant flowers that attract honey bees. When the air turns cold, the leaves turn a brilliant crimson purplish/red and sometimes yellow. The remains of the flowers are called panicles and are also visible in the fall, which gives the tree a spooky appearance. The nickname of these panicles is "dead man's fingers" which certainly add to its spookiness!

Guided Garden Tours Led by Ecologist "Dr. Ray"

See Nature's Lifecycles Through the Seasons

his year Hershey
Gardens was open
during the winter for
the first time. While guests
enjoyed the new indoor
Conservatory, there was a
secret world of discovery
outside that was waiting to
be explored.

Dr. Raymond Barbehenn, a nationally respected and well-published research scientist, created and led a series of guided walks for guests to learn about nature. His tours were so successful, that he extended them into spring, then summer, and now fall.

Here's a little bit more about Dr. Barbehenn in his own words:

I am a recently retired biologist, so the outdoors and the environment have always been of great interest to me for a LONG time. For 30 years, I conducted basic research in insect ecology ("bug-ology"), mainly at the University of Michigan. Of particular interest to me are the chemical and nutritional components of leaves that affect the growth of caterpillars.

While in Ann Arbor, I also enjoyed leading nature walks for school children. I have always liked teaching others about our natural environment, and Hershey Gardens provides a perfect layout of flowering plants, as well as vestiges of the original Appalachian



Ray as a young Bug-ologist in Malaysia

forest. With a milelong path through different habitats, it is the perfect place for visitors to learn about plants.

There's never been a time in my life that I wasn't doing something with plants or insects. I grew up netting and pinning insects, as well as chasing down new birds for my life list. Why the attraction to plants? Plants are everywhere. We

live in a green world, and wherever you go outdoors, you're surrounded by many types of plants. On the practical side, you need

to know species like poison ivy to stay safe, but it's hard NOT to learn about plants if one is a naturalist.

Guests seem to enjoy the tours I give at the Gardens; I think my enthusiasm for discovery and my ability to get people to interact with the plants in new ways are part of why the tours are so successful. I'll have tour-goers try an edible leaf, smell the many mint species or look up-close at the structures of flowers.

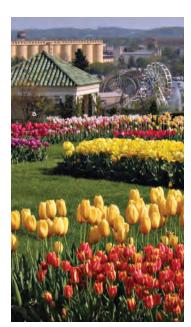
I've been leading the guided walks since January; no two are ever the

same. The plants go through remarkable changes from month to month, and each group of guests brings a different set of personalities and interests. In the winter, we explore the dormant plants, including tree identification and function. By late February, the first flowering plants bloom in the warmer parts of the Gardens, including Lenten rose, winter aconite and snow drops. By late spring, the Gardens change like a nature film in fast-forward. Rhododendron and tulip blooms come and go. Only the rose garden seems to hold across the seasons. This fall, walkers can look forward to learning more about seeds and edible nuts, fall foliage colors, herbs, and, of course, the roses.

> Take a Guided Walk with Dr. Ray Fridays and Saturdays at 1 p.m. Free with admission.



Dr. Raymond Barbehenn









Mark Your Calendar!



Member Reception Thursday, September 28 from 4:30 to 6 p.m. Look for your invitation in the mail.

Bonsai: Living Art of the Susquehanna Bonsai Club Friday, October 6 through Saturday, November 4 from 9 a.m. to 5 p.m.



Featuring bonsai trees in various shapes and sizes, this popular annual exhibit provides information on bonsai, what they are and how they are cultivated. The exhibit will be displayed in the Hoop House. Included in admission; members are free!



October 20, 21, 27 and 28 from 6 to 8:30 p.m.



Our most popular family event returns! Join the "glow" and walk the Gardens' pathway with more than 150 carved, illuminated and themed pumpkins. Kids ages 12 and younger are invited to bring a flashlight and

come in costume while trick-or-treating at eight candy stops throughout the Gardens. Plus, discover a unique collection of live spiders and insects on display in the Creepy Crawly Gallery - then make a stop at the pumpkin tent to watch live

pumpkin-carving demonstrations by students from Lebanon County Career & Technology Center. Tickets can be purchased at the door or at HersheyGardens.org; members are free! Please note: the Butterfly Atrium will be closed during Pumpkin Glow.



Fulton Bank

Hershey Area Art Association Presents "Nature's Art at Hershey Gardens" Friday, January 12 to Monday, January 15, 2018,

from 9 a.m. to 5 p.m.

See fabulous works of art by members of the Hershey Area Art Association. Exhibit on display in the Educational & Horticultural Wing. Included in admission; free for members.



Orchid Show & Sale

hosted by the Susquehanna Orchid Society

Friday, February 2 through Sunday, February 4, 2018 from 9 a.m. to 5 p.m.



Returning for the second year, the Susquehanna Orchid Society

presents the 34th annual orchid show and sale in the Milton &



Catherine Hershey Conservatory. More than 1,000 orchids representing dozens of orchid varieties will be on display including rare species and unique hybrids.

Orchid societies from Pennsylvania, Maryland and the District

of Columbia participate in the annual exhibit. In addition, vendors will have orchids for sale and showy displays that will be judged onsite and presented with awards. Included in admission; members are free!



Member Preview! Thursday, February 1 from 2 to 5 p.m.

Gardenfest

Sunday, March 11, 2018 from 9 a.m. to 5 p.m.

Hershey Gardens is proud to offer free admission for guests to enjoy the 23 acres, the Milton & Catherine Hershey Conservatory and the indoor Butterfly Atrium. Plus, from 10 a.m. to 3 p.m., enjoy presentations from local gardening and horticultural organizations.





A Night of Music & Wine at

MILTON & CATHERINE HERSHEY

CONSERVATORY

AT HERSHEY GARDENS

Friday, November 10 from 6:30 to 8:30 p.m.



Presenting Broadway performer Craig Schulman

CONSERVATORY NOTES

\$100 per person Supporting Level Sponsor: \$1500 (includes 6 tickets) Conductor Level Sponsor \$500 (includes 2 tickets)

> Tickets available at HersheyGardens.org. Limited seating; please reserve early.

All proceeds benefit







HO-HO-HOLIDAY HAPPENINGS

Enjoy the splendor of the holidays at Hershey Gardens.



Saturdays: December 2, 9 and 16 from 3 to 5 p.m.

Visit with Santa while enjoying live music in the Welcome Pavilion.

Sundays: December 3, 10 and 17 from 1 to 3 p.m.

Kids can make a holiday craft and enjoy story time with Mrs. Claus.

Activities included in admission; members are free.



Looking Back: The "Testa" Fig

lanted in front of the Herb Garden gazebo is a 6-by-6-foot fig bush. Every year it produces edible figs, made possible by a winter-insulating covering of wood shavings and plastic shrink wrap. This particular fig comes with local notoriety.

For decades, the Testa family grew a fig bush in Hershey on a prominent grassy peninsula that juts into the busy Hockersville Road/Route 422 intersection. The area once was part of Hershey's Italian-American neighborhood, home to immigrant stone masons who built many of Hershey's public buildings.

The fig was planted in the mid-1950s by the Testa family from a division brought from Italy. Many of Hershey's Italian immigrants transported cuttings of their beloved figs with them, planting them in their new American gardens. The "Testa" fig, as it came to be known, was a well-loved community plant.



Named for the family who donated the bush, the "Testa" fig is a piece of Hershey history.

When the Testa family considered selling the property in 2004, townspeople worried about the fate of this specimen that they saw lovingly wrapped in a blanket every winter.

To preserve a slice of Hershey his-

tory and folklore, Hershey Gardens' staff transplanted divisions – donated by Mrs. Emidio Testa – in the Herb Garden. The original plant is now gone, but its "Testa" fig progeny lives on.



Hershey Gardens 170 Hotel Road Hershey, PA 17033 HersheyGardens.org

FROM THE DIRECTOR

The Magic of Fall



Autumn is a gorgeous time at Hershey Gardens. Cool breezes replace the bold heat of summer and the vibrant colors of mums, grasses and majestic trees are everywhere. The Milton & Catherine Hershey Conservatory celebrated its first anniversary in July and guests filled the Butterfly Atrium and Gardens' grounds to see the exciting new changes. With the ability to extend the school field trip season and the addition of interactive and educational opportunities such as the BugZone and Hoop House, the Foundation's commitment to cultural and educational enrichment is strong.

For me, a different kind of magic is happening. From time to time, I remember a quote that I read many years ago, "and



suddenly you know... it's time to start something new and trust the magic of beginnings." I have made the decision to retire at the end of the 2017, relocate to the Delaware beach area and trust the magic.

I have had the honor of being one of many to keep Mr. Hershey's legacy alive, and I have loved my time at the former Hershey Museum, The

Hershey Story, Hershey Theatre and Hershey Gardens. Over the past few years, I have had the privilege of leading a wonderfully dedicated team who work tirelessly, care deeply and always have the mission of the Gardens at heart. They have thrived and grown through all the new challenges that becoming a year-round destination have brought. I know they will continue to reach, create and care... and with your support, Hershey Gardens will thrive.

Thank you for your membership. It is vitally important to the Gardens' continued success.

Mariella Trosko, Director

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