Greetings!

President's Column

Dear Friends of Holden Forests & Gardens,

Earlier this year, I had the opportunity to attend a meeting with directors from more than 40 large gardens and arboreta from across the country. The discussion topics ranged from the role of public gardens in our communities to climate change and sustainability to creative programming that best connects guests to the natural world around them.

As I participated in discussions with these other industry leaders, I was reminded of the valuable impact of organizations like Holden Forests & Gardens. The Holden Arboretum and Cleveland Botanical Garden campuses are far more than pretty places to visit. This issue of Forests & Gardens magazine gives us an opportunity to highlight some of the programs that make a difference in our community and to demonstrate how you make a difference as a friend and supporter.

The Hershey Children’s Garden at the Botanical Garden is celebrating its 20th anniversary this year. It was a groundbreaking garden at its founding and remains a leading children’s garden engaging children in outdoor experiences that foster a lifelong connection to nature. We are excited to offer special programs and events to acknowledge this important milestone. If you haven’t visited the Children’s Garden lately, please put it on the list for your next trip to the Botanical Garden. With or without young children, it’s a magical place.

Summer means a full house at the Long Science Center at the Arboretum. Each year we welcome more than 25 students as interns working across our science, conservation and horticulture programs. Training the next generation of plant scientists is one of our most important tasks for the future. I encourage you to attend the Symposium on Ecological Research (SEARCH Symposium) planned for Friday, Aug. 2 at the Cleveland Botanical Garden. Our interns would love the chance to share their summer research with you.

In this issue, we also tell the story of Project Wingspan, a two-year initiative sponsored by a grant from the National Fish and Wildlife Federation to the nonprofit Pollinator Partnership across eight states. We are proud that Ann Reapla, Arboretum Horticulturist, will act as the Ohio state lead. Arboretum horticulturists and research staff will be developing pollinator enhancement plots to determine the most effective means for restoration and enhancements to increase habitat for pollinator species at risk. You can see this work in action in the Crabapple Collection adjacent to the Arlene and Arthur S. Holden Jr. Butterfly Garden.

As members, donors and friends, you make our continued work to advance and inspire a deeper understanding of plants to enhance life possible. We are grateful for your commitment and engagement. We look forward to seeing you soon!

Enjoy the summer!

Jill Hoshi
President and CEO

On the Cover: Echinacea purpurea (purple coneflower)
Celebrating 20 Years in the Hershey Children’s Garden

Innovative Garden Was One of the First of Its Kind in the United States

By Kate Nickley, Hershey Children’s Garden Coordinator

More than 20 years ago, a group of children worked with crayons and white paper spread out on the floor of Clark Hall to illustrate a garden meant just for them. They drew apple trees and flowers, ponds and cornstalks. One boy, in a wheelchair, drew an image of himself in a tree house.

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More than 20 years ago, a group of children worked with crayons and white paper spread out on the floor of Clark Hall to illustrate a garden meant just for them. They drew apple trees and flowers, ponds and cornstalks. One boy, in a wheelchair, drew an image of himself in a tree house.

The drawings became the source of inspiration for landscape architect Herb Schauff’s design for the Hershey Children’s Garden (HCG), which opened in the summer of 1999. The iconic garden is filled with the things that the children imagined, including the treehouse where a boy in a wheelchair could play. This design process illustrates one of the things we love most about the HCG: It is a space that was created for and by children. It is a space where children are valued for their creativity, experiences and ideas – for their very essence and being.

From its inception, environmental education has been central to the garden’s mission. “Children aren’t growing up with nature anymore,” said Debbie Hershey Guren, whose gift made the garden possible. “The garden fosters love for the earth, gardening and discovery of nature.”

Holden Forests & Gardens believes love for the earth means love for the natural environment and people. We support a humanistic form of environmental education that emphasizes human connection with their natural environment and with each other. We hope to inspire environmental stewards who actively work to create a positive social impact, and we believe there is no such thing as environmental stewardship without empathy.

Starting with this perspective of environmental education, we educate through two means. The first is by providing spaces for unstructured experiential outdoor learning, or nature play. Through play, children can gain many insights about the world around them, learn to cooperate with others, test their limits, build physical coordination and develop a sense of resilience. From our pond to our water pumps to our prairie, the garden is ripe for nature-play. We also offer informal programming to facilitate inquiry-based learning. Our crafts, games and garden explorations are designed to spark children’s innate curiosity. When children ask questions, we empower them to find the answers. Allowing them to do that might mean providing tools or other resources or encouraging further observation or experimentation.

During its first two decades, the garden has hosted thousands of visits for programs ranging from free, drop-in style programs, such as daily activities and story time, to registered classes and events such as Fairy Picnic, Bio-Circular Bash and Sensory Mobility Days. In 2018, Hershey Children’s Garden served more than 6,000 people with drop-in style activities and over 3,700 people with registered events. The children’s garden is also a haven for school groups. Many of the 7,300 children who came to Cleveland Botanical Garden for field trip or camp programs spent time exploring the children’s garden. This year, we are excited to offer an array of new programs including our Garden Explorers Program, Garden with Green Corps Days, and English Language Learner Day among others. We are also offering a few special events to commemorate the 20th anniversary including a birthday party and a special opportunity for adults called “Inner Hol Night.”

The garden’s horticulture cultivates a unique learning environment. Unlike display gardens, there is an open invitation to explore and among plants. Children are invited to pick, prod, tamper and eat the plants. The horticulture style is both unstructured and whimsical – unstructured in that you can find plants that look as if they are naturally occurring and are not overly manicured. For example, you can find plants that topple over, or plants in different stages of their life cycle from budding to decomposing. The horticulture style is whimsical in the diversity, scale and themes. You can find native prairie plants, aquatic plants, carnivorous plants, trees and crows all within the same garden. You can gaze up at 15-foot-tall reed grass, or duck under a weeping mulberry tree tunnel.

Although the physical space, programs and horticulture make this garden a treasure, the children’s garden is truly special thanks to the countless people who have created memories in it over the years, from visitors to volunteers to donors. We hope you and your family will take delight in the garden during its 20th year. Hope to see you there!

A special thank you to The Hershey Foundation for its generosity and continued support.

You can find more information about this summer’s Hershey Children’s Garden programs in the class schedule on page 3 or by visiting our website at cbgarden.org

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The garden’s fountain offers children the chance to cool off on a warm day.

The future of the garden is sunny. We will continue to restore and revitalize essential garden elements including the treehouse and upcycled planter garden. We will continue to support diverse plant communities that thrive under changing light conditions as the garden ages. We will work to expand upon the inclusive nature of our garden, from the design of structures and spaces to programs.

As for future goals, we hope to transition the garden to a “four seasons garden,” with features that are ripe for discovery and exploration all year round. Imagine creating under a low tunnel to plant vegetables in the winter. Who knows, you may even be able to see aquaponic gardens, an outdoor classroom or outdoor kitchen in the garden one day.

The garden's fountain offers children the chance to cool off on a warm day.

The treehouse is one of the features of the garden.

A vintage style pump allows children to fill a watering can and help tend to the garden's plants.

Children create botanical art at the potting bench.
Diving Right In: Immersive Internships Educate the Next Generation of Scientists

By Katie Stuble, Scientist

Benjamin Franklin once said, "Tell me and I forget, teach me and I may remember. Involve me and I learn." In this spirit, Holden Forests & Gardens research internship program moves into its second decade of educating the next generation of scientists, inviting undergraduates from universities across the country to "dive right in" to research. Over the past 10 years, HF&G research staff have mentored more than 500 students, helping them to develop the skills needed to tackle the challenging research questions of the 21st century.

“When I arrived at Holden 12 years ago, there was very little training to learn about careers at public gardens,” said David Burke, chief program officer for science, horticulture, and conservation. “This seemed like a missed opportunity. There is an excitement among young people for plant biology and ecology, and a real interest in helping to solve some of our pressing environmental and conservation issues, as well as need for internships to help them develop the skills needed for a career in science. Bringing students into the research department to work with us during the summer seemed like a natural fit for our research and education mission.”

CONSERVING OUR NATURAL AREAS AND IMPROVING OUR COMMUNITIES

HF&G interns also help advance our vision of creating a greener world. Over the past decade, students have explored ways to increase Cleveland’s tree canopy, investigated how plants respond to rising global temperatures and even tracked the impacts of acid rain on forest plant communities at the Holden Arboretum. These are immersive experiences where students help develop a research project, which they see to conclusion over the summer. These projects enhance our understanding of the ecology of Holden Forests & Gardens, Northeast Ohio and beyond and are woven into the broader framework of ongoing research at Holden Forests & Gardens. Year after year, the students help us build the scaffolding of research required to better understand and care for our natural world. The goal is to learn how to better conserve our natural areas and improve the health of our human communities, and to share that information with professionals and practitioners alike. To this end, the Research Department works with many of its summer interns to publish the results of their work in scientific literature.

In turn, HF&G interns contribute substantially to research productivity. “Much of the research that takes place here would not be possible without the hard work and dedication of interns,” said staff scientist Juliana Medeiros. “The interns also bring a fresh perspective and contagious enthusiasm for plant ecology and the environment. In turn, HF&G interns contribute substantially to research productivity.”

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VENTURING INTO NEW WATERS AT SEARCH

Four years ago, the Research Department introduced the Symposium for Ecological Research (SEARCH), providing a venue for interns to present posters of their research to the public in a casual and friendly atmosphere. In addition to HF&G interns, undergraduate students from local universities also are invited to share their research. This vital program has grown substantially since its inception, drawing nearly 30 presenters and more than 100 attendees in 2018.

SEARCH provides HF&G interns with valuable real-world experience communicating their research to the public and a key part of our program. Strong communication skills are critically important to promoting success in all aspects of science, from sharing important findings with the scientific community to making these discoveries accessible to the general public.

By the end of the summer, the students are incredibly excited to share what they’ve learned. “We’d love to invite community members to come and chat with them about all the exciting discoveries they’ve made,” Burke said. The SEARCH Symposium will be held this year on Friday, Aug. 2 from 10am to Noon in Woodland Hall at the Cleveland Botanical Garden.

ANNA PARKER, 2016

I really enjoyed my time as a summer intern at Holden. The internship gave me the opportunity to experience scientific research outside of a purely collegiate context while helping me broaden my field and laboratory skillsets. Beyond that, everyone was so helpful, kind, and dedicated to making our projects fulfilling. Parker is a doctoral student at the University of North Carolina at Chapel Hill.

FIONA DUONG, 2018

I am currently working as a research assistant in a laboratory that studies the physiology of pome fruits, and plan to apply to a graduate program in plant biology. My internship at Holden not only gave me the opportunity to gain research skills and work with an extremely supportive network of scientists, it also helped me become more confident and allowed me to grow as an individual.

SERGIO ANDRES SABAT BONILLA, 2017-2018

As a Puerto Rican, my objective is to gain the tools needed to study and conserve the ecological beauty of Puerto Rico, but also promote the advancement of Latinos in ecology. Currently, I am a master’s student at Georgia Southern University where I am studying the effects of climate change on aquatic invertebrates. During my time at the Holden Arboretum, I worked with Dr. Katie Stuble as a summer intern and later as the Norweb Fellow. This hands-on exposure to the life of a researcher not only provided me with the experience to go into my master’s with the capacity to carry out good science but also made me a better scientific communicator. I will be forever grateful for the opportunity that Dr. Stuble and everyone at Holden has given me.
Despite the male's striking color, scarlet tanagers can be difficult to spot in the summer. They spend most of their time in the dense canopies of mature deciduous forests and mixed deciduous-coniferous forests in eastern North America. During the fall and spring, they migrate through similar forest habitats and can be seen in less dense areas, including gardens and parks. They winter in mature forest in northern and western South America.

Scarlet tanagers eat mainly invertibrates including ants, moths, butterflies, bees, flies, cicadas, leafhoppers, dragonflies, dobsonflies, snails and spiders. They glean insects from trees or catch them in flight, but rarely pick insects from the ground. They swallow small prey whole, but will kill larger prey by squishing them onto hard surfaces such as branches before consuming them. In addition to invertibrates scarlet tanagers will also eat fruit and tender buds off trees depending on the time of year.

In the spring, male scarlet tanagers are the first to arrive to establish breeding territories. They attract females by vocalizing and stretching out on a branch below the females to show off their bright scarlet plumage. Once a pair is established, female scarlet tanagers choose a tree next site on a horizontal branch away from the trunk in a cluster of leaves, 30 to 50 feet above the ground. They nest in mature deciduous trees such as maple, oak and beech and will on occasion nest in eastern hemlock. Females build a flimsy nest in three to four days. The asymmetrical nest is loosely woven with twigs, grasses, stems, bark strips, roots and pine needles. It's lined with fine plant materials. Females lay three to five pale blue brown speckled eggs, which are incubated for 13 to 14 days. The young are tended to by both parents and leave the nest 15 days after hatching. Both parents feed the fledglings until they are 25 days old.

According to the North American Breeding Bird Survey, scarlet tanager populations have declined by approximately 14 percent between 1966 and 2016. Their estimated global breeding population is 2.2 million. Change in land use and forest fragmentation could be responsible for declining populations over time. Forest fragmentation exposes nests to cowbird parasitization and predation. Preserving and restoring large tracts of mature forest for breeding, migrating and wintering will help the scarlet tanager thrive.

**Clematis**

By Ethan Johnson, Plant Records Curator

Some of the more striking flowering plants at the Holden Arboretum and Cleveland Botanical Garden are Clematis. A member of the buttercup family (Ranunculaceae) along with Anemone, columbine (Aquilegia), Delphinium, and 52 other genera of temperate and boreal plants. Clematis is native to all continents except Antarctica and the only genus in the family that contains woody vines.

The large deep purple flowers of Clematis ‘Jackmanii’ may be seen in the Hershey Children’s Garden of the Cleveland Botanical Garden on the west side of the vegetable and herb sector in May and June and early July. Jackman clematis is a tried and true cultivar bred in England by George Jackman of Woking in 1858. Nearby on the north arbor is the more recent (2000) Clematis Crystal Fountain, with double lilac-blue flowers May-July. If the plant is rejuvevation pruned to remove all stems back near the ground during dormancy it will allow for new growth. Flowering will be delayed the following year on these spectacular bloomers. At the minimum, selective pruning of dead and weak stems is recommended for any woody plant. We have not taken the trouble to perform high maintenance annual pruning just after flowering and tying of stems to supports. Plants that perform well enough without extraordinary care are preferred.

In the Evans Restorative Garden west of the water fall area there is Clematis Josephine,4 with double lilac-pink flowers from May to July, introduced in 1998. These large-flowered clematis do not develop prominent double flowers when growing in our garden, and the resulting blooms are even more beautiful as a result.

In the Arboretum’s Myrtle S. Holden Wildflower Garden, Clematis virginiana, with small white flowers that bloom in August and September can be found on both the north and south side of the garden, with the southern plants being in more sun and therefore producing more flowers. Closely related eastern Asian sweet autumn clematis (Clematis terniflora) and Clematis spicata have small white flowers and grow prolifically. However these species have been removed from our collection as they seeded in and overgrew other plants in our gardens. This led us to evaluate their invasive potential within natural areas as being too high. We do not recommend sweet autumn clematis or Clematis spicata for landscape use in northeast Ohio.

An herbaceous species from Korea and China that is a favorite of volunteers and Lanestm Court horticulturist Craig Schrader. Clematis heracleifolia, provides pollinators with nectar from July through mid-September, its small, mildly fragrant tubular flowers with recurved, blue petals bring the subtle yet charming attraction. The plants grow 2-4 feet tall and are not aggressive or long-lived needing to seed in to remain within a garden bed at the Arboretum. In the courtyard at Botanical Garden, between the Garden Store and the Western Reserve Herb Society Garden, there is a number of Clematis including ‘Bally Corning’, Crystal Fountain, Ice Blue, and Rubromarginata. The ones with the smaller flowers perform best, while the large flowered trademarked varieties may or may not persist.

North of the formal garden in an island bed, Lanestm Court is a showy large, red-flowered Clematis viticosa, Nearby to the east in the perennial border is Clematis integrifolia, the solitary clematis from Europe and Asia, a non-vining type with a woody base but otherwise herbaceous. This species is more vigorous than most being adapted to a continental climate such as ours: It sports nodding blue flowers with flamboyantly curved petals from late May to early September, but planted in partial shade as in the Evans Restorative Garden at the Botanical Garden, bloom of this charming plant starts the first week of June.

**PLANT FACTS**

**LIGHT:** Part shade to 1/4 sun, but can take full sun if kept constantly moist.

**SOIL TYPE:** Moist to fairly wet: clay, silt, loam or even sandy soil if enough compost is added: acid to neutral

**MATURE SIZE:** 4-5 feet tall, spreading slowly by stolons, so width depends on age.

**BEST LOCATION:** USDA Zones 3-9

**SOURCE:** Local, garden centers or mail order

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**BIRD FACTS**

**SIZE:** 6-9 inches

**WINGSPAN:** 9-11 inches

**DESCRIPTION:** Male: Bright red with black streaks post molt during breeding season. Immature males and adult males during the non-breeding season resemble females: Bright red with tails.

Females: Olive-yellow with darker olive wings and tails.

**RANGE:** Breeds in eastern North America; winters in South America

**VOICE:SONG:** 4-5 trappy phrases that sound like underwhistled notes.

**BEST LOCATION TO VIEW:** The Hershey Children’s Garden and Old Valley trails

**CALL:** chick-burr

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**PLANT PROFILE**

**Clematis Josephine**

**Clematis Rocknroll**

**Clematis Crystal Fountain**

**Clematis Rubromarginata**

**Clematis Jackmanii**

**ClematisTERNIFORA**

**Clematis apiifolia**

**Clematis heracleifolia**

**Clematis Rubromarginata**

**Clematis Josephine**

**Clematis Terniflora**

**Clematis Rocknroll**

**Clematis Spring Glory**

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**FORESTS & GARDENS**

**BIRD BIO**

**DESCRIPTION:**

**SIZE:**

**BEST LOCATION TO VIEW:**

**BEST LOCATION:**

**BEST LOCATION:**

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**PLANT PROFILE**

**Clematis**

**Clematis**

**Clematis**

**Clematis**

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**SUMMER 2019**

**FORESTS & GARDENS**

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**Clematis**

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Gifts to the Annual Fund Have a Positive Impact on Holden Forests & Gardens and the Community

By Cait Anastis, Editor

Holden Forests & Gardens’ community forestry initiatives, environmental research and nature-based education programs take more than just time and effort; they also require support from the community. While private support comes from a wide range of sources, including corporations and foundations, gifts from individuals are key.

One of the easiest ways for friends of the Holden Arboretum or Cleveland Botanical Garden to make a difference and support vital programs on HF&G’s two campuses and in the community is through a gift to the annual fund.

“The annual fund is a very important piece—whether it is our members, or donor members and leadership donors, who receive member benefits yet make that additional philanthropic gift to help support the operations and growth of Holden Forests & Gardens,” said Deborah Miller, vice president of development. “Currently, 25 percent of the annual operating budget is supported through gifts from individuals, corporations and foundations. This includes memberships. Roughly 12 percent of that support received through the annual fund is ideally, we need philanthropic support to grow so that our organization can bring new and exciting programs forward for our guests and provide even greater impact for the community.”

HF&G’s Annual Fund Manager Katie Brindker, who joined the development team in February, strongly believes in the power of a gift to the annual fund to advance existing programs and help support new initiatives.

“That’s the beauty of the annual fund; it’s all-encompassing. I think that is why I like working with the annual fund, you can highlight a lot of things that are going on in the community,” she said. Brindker considers the annual fund a lifetime for the organization. “These unrestricted gifts can be used for anything, including supporting the creation of new programs. I really feel that this money gets to the mission faster. We can put the donor’s gift into action right away, and there is the possibility of an immediate impact.”

The impact of an annual fund gift is what makes it so powerful, as the effects ripple out into the community.

“Gifts to the annual fund support every aspect of our organization—from horticulture, to facilities, to exhibits and shows, to education programs in the schools and communities to research,” Miller said. “A gift can impact thousands of people who visit the Cleveland Botanical Garden or Holden Arboretum each year. It takes a large community of people to keep our gardens and trees beautiful for our guests, bring in special shows and exhibits, and teach children and adults about plant science or how to care for their gardens and woods.”

In order to increase giving to the annual fund, Brindker will be sending out an appeal to members and donors in June, seeking support. To learn more or to contribute to the annual fund, contact Brindker at 216.707.2862 or at kbrickner@holdenfg.org.

The Good Roach: Madagascar’s Hissing Cockroach

By Mark Bir, Glasshouse Manager

There are nearly 5,000 cockroach species sharing the planet with us. Yet out of that frightening number, a mere half-dozen are pests. The rest are, well, really okay.

I want to introduce you to one of those okay roaches—the hissing cockroach from our Madagascar biome— the goodroach.

The hissing cockroach is clean and tidy. Spending their lives roaming forgotten corners of Madagascar forests, eating fallen fruit and detritus from the forest floor, they provide a natural recycling service to their ecosystem. Roaches are only as dirty as their environment, and away from the dingy of dumpsters and dirty domiciles, hissers are as clean as their forest home. They also enlist personal housekeepers in the form of a commensal mite species, which eats the fungus and dirt from their exoskeletons. Look closely with a hand-lens at one of ours, and watch the mites at work. Hissers are also smooth and dry to the touch and have no odor.

The hissing cockroach is capable. They have clawed, multi-surfaced feet that are treaded with thousands of conforming, gripping micro-pads that allow them to form-to and grasp all surfaces, soft and slippery or hard and jagged, and even to climb glass.

Female hissers are also ovoviviparous, or egg-carrying and live-bearing. This adaptive advantage over egg-laying cockroach species provides motherly protection to the helpless young until they emerge as not as helpless eggs, but as ready-to-go first instar cockroaches. The hissing cockroach has behavior. Specifically, hissers display emergent behavior, where local actions absent of social oversight result in functionality organized group behaviors. An example is when a colony of hissers makes a unified retreat from bright light or the threat of a predator. One roach’s alarm is a signal to the next, which signals the rest are, well, really okay.

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Community Forester Courtney Blashka teaches students how to plant a tree.

Cait Anastis

IN THE GLASSHOUSE
Decreases in pollinator populations throughout the country have sparked a recent influx in pollinator restoration and enhancement projects seeking to increase habitat for species at risk. According to a recent study conducted by the Monarch Conservation Science Partnership, "There is a substantial probability of 'quasi-extinction' of the Eastern monarch butterfly population within 20 years if ambitious habitat restoration and conservation goals are not achieved."

While many factors including habitat loss, climate change, pesticide use and invasive species have had a detrimental effect on the monarch population, loss of milkweed has been the most devastating. Holden Forests & Gardens has partnered with the nonprofit Pollinator Partnership in an effort to increase monarch populations.

Holden Forests & Gardens has participated in various monarch and pollinator projects. These projects led to further opportunities with the Pollinator Partnership. That same year, horticulturists began working with volunteers to create pollinator habitat for monarchs.

Across Ohio, this project is a collaboration between Holden Forests & Gardens, the Pollinator Partnership, the Holden Jr. Butterfly Garden and the Ohio State University Peanut Program. In 2015, Lori Gogolin, horticulturist for the Arlene and Arthur S. Holden Jr. Butterfly Garden, began participation in Monarch Wings Across Ohio. This project is a collaboration between Holden Forests & Gardens, the Pollinator Partnership and the Helen and the Eleanor Smith Foundation, in response to the Presidential directive to support the monarch migratory path. The goal of this project is to create a long-term habitat that can be used by monarchs on their journey.

Additionally, a small team of staff has been charged with coming up with a Pollinator Plan to ensure that our practices here at Holden Forests & Gardens benefit pollinators. As part of this process, the staff will assess fields and meadows to determine potential restoration or enhancement areas and conduct plant community and pollinator surveys in select meadows at the Arboretum to gain baseline data to inform future mowing guidelines and restoration projects. These surveys will be used to revise the management of our fields and meadows to optimize conditions for butterflies and pollinators. This Pollinator Plan also allows for pollinator enhancement plots to be installed in a grass dominated meadow within the crabapple meadows to optimize conditions for butterflies and pollinators where it is most congruent with our overall land management objectives.

The information obtained from this project will be used to inform the process of restoring future sites at Holden Forests & Gardens and other locally similar habitats.

Helen Keller once said, "Alone we can do so little; together we can do so much." It is our hope that the partnerships within this institution and between other like-minded institutions, such as the Pollinator Partnership, will help to create a world where pollinators flourish and future generations will have the ability to witness the beauty of the Monarch butterfly.

If you would like to be involved in collecting data or seed in an effort to promote pollinators, please contact Sarah Hartley, volunteer coordinator, at 640.620.8003 or shartley@holdenfg.org and volunteer as a phenology/pollinator monitor.

Ann Rzepka acts as the state lead for Ohio on behalf of the Pollinator Partnership.

Swamp milkweed (Asclepias incarnata) is a food source for adult monarch butterflies. Garden phlox (Phlox paniculata) is a food source for adult monarch butterflies.
NEW PARTNERSHIP ENCOURAGES MENTOR-AREA RESIDENTS TO CHECK OUT THE WARREN H. CORNING LIBRARY

A new partnership with the Mentor Public Library is giving library patrons a new way to check out the collection of the Holden Arboretum’s Corning Library. Area residents will find a selection of about 60 books from the Arboretum’s collection on display and available for checkout at the Mentor Library’s main branch on Mentor Avenue. The display highlights the Arboretum as a destination for gardening enthusiasts and nature lovers while showcasing the Arboretum’s Corning Library as a resource for Holden Forests & Gardens members and visitors. The collection made its debut in February and was an immediate hit with library patrons. Within the first week, half the books had been checked out by Mentor residents eager to start planning spring gardens or taking an armchair break from the winter weather. Since then, the collection has continued to resonate with library patrons. Recent statistics from Mentor Library show that each book has circulated at least one time. There have been 65 checkouts, and the items have been renewed for a total of 50 times during the period.

“We have been very pleased with how well the books are circulating,” said Judy Schultz, circulation services manager. “People have been taking the Holden Forests & Gardens informational brochures, too.”

To keep it fresh, we will continue to monitor circulation statistics and remove books that have stopped circulating and bring in new ones.

The collection is just the first stage of the growing partnership with the local library. Sometimes this year, Arboretum visitors will find a “Little Free Library” box on the grounds, stocked with books by the Mentor Library. Guests are encouraged to take home a book from the library box or leave a book of their own inside for others to use.

MASTER RAIN GARDENER COURSE: LEARN HOW TO DESIGN AND INSTALL RAIN GARDENS

Saturday, July 31, Aug. 7, 14, 21, 28, 10:00am – 1:00pm

This Master Rain Gardener Program will teach you how to manage rainfall in your own yard. Rain gardens naturally manage stormwater by infiltrating precipitation and allowing it to soak into the ground rather than sending it directly to storm sewers and nearby streams untreated. Experienced instructors will provide customized feedback which will enable you to design and install a rain garden. Topics will include site assessment, soil analysis, design, construction, plant selection, mulching, and maintenance. Residential participants will receive a certificate, Master Rain Gardener T-shirt, and yard sign upon course completion. Professionals will be awarded a Master Rain Gardener Certification.

This five-week course can be taken in-person or online. The in-person course will be held at the Lakefront Lodge in Willowick at 30525 Lakeshore Blvd. The online course will be offered as five weekly modules, allowing for more flexibility.

Email Laura Bonnell with questions at lbonnell@crwp.org or 440.979.3870, ext. 1002. To register, visit eventbrite.com/o/chagrin-river-watershed-partners-inc-19735567653

The Holden Arboretum display at the Mentor Library.

You can learn more about volunteer opportunities at Holden Forests & Gardens by coming to our Volunteer Open House. Discover your passion for plants and nature, and how you can be a part of our mission to advance and promote the Arboretum and the Holden Forests & Gardens by coming to our Volunteer Open House. Discover your passion for plants and nature, and how you can be a part of our mission to advance and promote the Arboretum and the Holden Forests & Gardens. The event will be held at the Lakefront Lodge in Willowick at 30525 Lakeshore Blvd. The online course will be offered as five weekly modules, allowing for more flexibility.

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The new collection has proven popular with readers.

Enjoying Nature with Others, Week After Week

By Sarah Hartley, volunteer coordinator

Meet Linda Lozzi, PhD, Holden Forests & Gardens, Tram Tour Guide volunteer at the Holden Arboretum. Linda has been volunteering with HFG for six years, and during that time, she has shared with thousands of visitors the wonder that is the Arboretum.

**Q:** Why did you start volunteering with Holden Forests & Gardens?

**A:** Being retired, I was looking for something to do. I met up with friends at Holden, so I talked to the volunteer manager who, after asking me about my background and current volunteer status, suggested that I might be interested in giving tours from a tram. I was so interested. I had picked up a book on the names of the flowers and began to learn about the Arboretum.

**Q:** Out of all the different volunteer positions that we have available, why did you choose to become a tour guide?

**A:** I had been guiding hiking groups through the gorge at Penitentary Glen as a volunteer naturalist doing interpretation on geology, botany, so interpreting nature at the Arboretum definitely appealed to me. Plus, I thought doing a tram tour would be fun. After attending one training day each week for a month, I was asked if I could volunteer for those positions from Monday to Saturday. I started volunteering late in the year, and I have volunteered every week.

**Q:** Why did you start volunteering with Holden Forests & Gardens?

**A:** Having been retired, I am interested in being involved in volunteer opportunities that are fun, meaningful, get me outside and make me happy. I knew a few people who were volunteering at Holden, so I talked to the volunteer manager who, after asking me about my backyard and current volunteer status, suggested that I might be interested in giving tours from a tram. I was so interested. I had picked up a book on the names of the flowers and began to learn about the Arboretum.

**Q:** What has been your most memorable experience as a tour guide?

**A:** Many tours are memorable, but I specifically remember a tour where we were driving the tram to see the azaleas and rhodies in bloom. In early May, the azaleas and rhodies are in bloom. In July, the perennials bloom by the pond. In August, the tall grass prairie shows its colors. In September, the asters bloom, and the palette shows off. In October, the leaves change colors, and the palette changes, and there is something new to talk about every week.

**Q:** Out of all the different volunteer positions that we have available, why did you choose to become a tour guide?

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**Q:** What is your favorite area/garden at Holden Arboretum?

**A:** For the first two years, I filled in shifts where needed, but for the last four years, I have been giving three tours every week for the six-month season. I do seven tours a season, and my favorite thing to watch is how things change from week to week. In mid-May, the azaleas and rhodies are in bloom. In July, the perennials light up in the Arlene and Arthur S. Holden Jr. Butterfly Garden and Pennington Beds. In early summer, the butterfly tadpoles in Blueberry pond are abundant. In August, the tall grasses bloom. In September, the asters bloom along Corning Lake. Last fall, migrating monarchs found those asters and refreshed themselves there for several days. One October, we were lucky to see a fox doing her hunting dives into the grass. The palette changed constantly, and there is something new to talk about every week.

**Q:** What is your favorite area/garden at Holden Arboretum?

**A:** Being a tram tour volunteer is personally very satisfying. I have fun driving the tram, I enjoy watching the changing parade of blooms and critters. In the end, making many people happy is meaningful to me.

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The Woodland Express model train exhibit will be on display June 15 - Sept. 15 at the Holden Arboretum. Learn more at holdenarb.org.