Meristems

The Polly Hill Arboretum West Tisbury, Massachusetts

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Redbud, Cercis canadensis 'Pauline Lily' Photo: Thomas Clark

Polly Hill Arboretum Celebrates 20 Years as Public Garden

Who could imagine such a place? —Arboretum founder Polly Hill, 1998

Polly Hill's words resonate powerfully as we head into our 20th year as a public garden. At PHA we remain grateful for this dynamic institution and for the enduring support of our members. What the Arboretum has become over the last 20 years is a remarkable story of caring, dedicated people who recognized the importance of Polly's groundbreaking work and the value of our iconic Vineyard buildings and landscape. Just as critical to our establishment was the recognition of PHA's potential to grow and prosper into the local, regional, and internationally respected arboretum it is today.

Today we look back to those early days

with gratitude and feel pride for the many accomplishments that have transpired over the past 20 years. Nearly 19,000 school children have visited and learned Polly's story and about the plants that make life on Earth possible. Thousands of adults have attended our education programs that bring the leading names in horticulture, botany, and natural sciences to our lecture series and workshops. The stories of our past interns, who now occupy jobs in horticulture, botany, and education, are impressive. Many of them now hold important positions in American botanical gardens and arboreta.

The backstory of PHA is that people, plants, and place are a winning combination! Today our talented staff continues to make improvements to our facilities, programs, and collections. We do this in a rewarding partnership with our amazing volunteers, who have provided thousands of hours of time teaching, leading tours, gardening, and working in the herbarium, on our grounds, in the greenhouse, and at the Visitor Center.

While these achievements are remarkable, they rely on another important accomplishment—the successful preservation of our 72-acre campus, a quintessential Vineyard landscape and the backdrop to all of our activities. PHA continues to grow and make an impact in the Vineyard community and beyond. Please plan to join us this year as we celebrate our history and our 20th anniversary, and look forward to many more years of connecting people, plants, and place at the Polly Hill Arboretum.

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The Polly Hill Arboretum

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Todd Rounsaville Curator

The mission of the Polly Hill Arboretum is to perpetuate the experimental tradition in horticulture established by Polly Hill by sharing knowledge of plants and scientific procedure through educational programs, research, plant conservation, and exploration. The Arboretum seeks to preserve its meadows and woodlands, to promote an understanding of its collections, and to encourage their utilization for scholarship, observation, and the enjoyment of all.

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PHA Founder Polly Hill (1907-2007) Photo: Alison Shaw

Message from the Director

I get misty-eyed thinking about PHA throughout the years. Change is the only constant in our lives, and while I am nostalgic about trees we've lost, I am in awe of the new plants in our collection that are now revealing their true potential. I always remember that Polly Hill saw a lost tree as an opportunity. Change leads to growth.

This edition of *Meristems* introduces you to new employees, recent grants, and exciting programs all within the milestone year of our 20th anniversary. Over our first 20 years we have experienced constant evolution and monumental developments: the building of our greenhouse in 2006 that has yielded thousands of plants; the considerable resources we have dedicated to the preservation of our agrarian spirit of place through the renovation of the Cowbarn (2008) and the Far Barn (2011); and, of course, the construction of the Littlefield Maintenance Building (2009) and the Education Center and Botany Lab (2016), both a dream come true.

This year we introduce a celebratory timeline of our accomplishments over the last 20 years with an exhibit in the Far Barn. This photographic display looks back at the fortuitous meeting of Polly Hill and Dr. David H. Smith and traces our achievements as a public garden. You will walk away with an appreciation of our historic landscape and the people who have stewarded PHA from a young seedling to a well-rooted, thriving tree. Trees are the essential component of an arboretum; that's why we're here! In celebration of our 20th anniversary, 20 iconic Arboretum trees will be featured on walking tours led by staff.

PHA is making an impact in the Island community and beyond. We measure our progress by our work, which is rooted in our mission of plant science, conservation, and education. We are inspired and sustained by our members, board of trustees, volunteers, student interns, and all the people who have made a positive impact on our growth over the past 20 years. Please plan to join us this year as we celebrate PHA!

/ imochy M. Bland

Save the Date!

In honor of PHA's 20th year as a public arboretum, we would like to invite all of you to join us on Saturday, July 28, for an afternoon/evening of music and celebration for the whole family. Guests will enjoy tours, games, and music by the Island's own Pickpocket Bluegrass Band. Dinner will be available to purchase from the Food Truck in conjunction with Offshore Ale. We hope you will join us!



Taylor Stone, cut paper artist and author/illustrator of *Vineyard Magic*, has designed a special t-shirt for PHA's 20th anniversary. Look for it on sale in the Visitor Center this season. Consider picking one up for yourself, or for a gift, on your next visit to the Arboretum.

"Save for the Archives"

Archives preserve history, tell stories, and provide the memory for an institution. Polly Hill envisioned her papers being saved; on many pieces of correspondence and articles she wrote a note at the bottom: "Save for the archives." PHA's archives are a rich trove of information and artifacts that record a horticultural life and the establishment of an arboretum. However, just as we accession and keep records on plants, we must organize, catalog, and conserve these one-of-kind letters, photos, maps, drawings, and more. Fortunately we have two qualified archivists on the job.

Karin Stanley (Education, Membership & Outreach Coordinator for 12 years before her retirement) and Youth Education Coordinator Jill Bouck are busy organizing the personal papers of Polly Hill and conserving and cataloging PHA's institutional archives. Spurred by her interest in history, Karin earned a certificate in museum studies from Tufts University while employed at PHA; her coursework included an internship at the Martha's Vineyard Museum (MVM) where she cataloged archival collections. Jill was chief curator at MVM for 18 years where, as part of her duties, she provided proper archival storage for paper-based collections. During her tenure at PHA, Karin began organizing Polly's papers into a formal collection with the help of dedicated volunteers. She is pleased to return to the project and would like to thank volunteers Leslie Gray, Cathy Minkiewicz, Sally Pierce, and Carol Salguero; their work formed the initial core of the collection.

Karin and Jill are dedicated to preserving the archives for their enduring value. There is a wide range of material to sort through. The first phase of the project is the consolidation of all materials and organization by topic, date, individual, and relevance to the history of PHA. All original manuscripts, photos, artwork, publications, maps, and other items will be rehoused into acid-free, archival storage containers; in addition, original manuscripts will be copied on to acid-free paper. The archives will be stored on the top floor of the Education Center and Botany Lab, with finding aids to make the materials more accessible. A potential second phase of the project would include digitizing important paper-based materials and cross-referencing by topic, names, and dates.



Jill Bouck (left) and Karin Stanley (right) diligently organize Polly's papers.

Staff News

Executive Director Tim Boland traveled to Raleigh, North Carolina, to attend the Magnolia Society International Conference in March. Then in April, he joined PHA research associate Melissa Cullina at the Harvard Herbaria and Libraries in Cambridge, Massachusetts, to continue work on the Flora of Dukes County. In May, he traveled to Fort Worth, Texas, to attend the Center for Plant Conservation's (CPC) annual conference. The CPC is a network of scientists, governmental groups, and educators that work together to facilitate the work of plant conservationists.

In March, Curator Todd Rounsaville attended the first meeting of the Plant Collecting Collaborative (PCC), hosted by the Morton Arboretum in Lisle, Illinois. The PCC was formed in 2015 with the goal of planning and funding collaborative plant-collecting expeditions. Seed is shared with member institutions thereby increasing and promoting wild-provenance plant diversity in North American plant collections.

Education, Membership & Outreach Coordinator Ann Quigley traveled to Richmond, Virginia, for the American Public Gardens Association (APGA) Education Symposium, *Beyond the Garden Gate: Creatively Growing Education*, in November. In March, Ann attended the Ecological Landscape Alliance Conference held at UMass Amherst, attending talks on designing "wild" natural spaces, rethinking the paradigm of invasives, and building resilience into design. Ann attends conferences both for the educational value and to garner ideas for programs at PHA.

In March, PHA Horticulturist/ Arborist Ian Jochems collaborated with Melinda DeFeo of the Edgartown School's farm and garden program and Jamie O'Gorman, gleaning program leader for Island Grown Initiative (IGI), to hold a fruit tree pruning workshop for IGI staff and volunteers. The training was funded by a grant Melinda obtained from the MV Agricultural Society. As a result of Ian's instruction, the IGI gleaners, who work with farmers to gather excess produce and deliver it for free to Islanders in need, have the skills to prune fruit trees for maximal yield.

New Horticulturist Joins PHA Staff

Join us in welcoming Oliver Osnoss to the PHA staff as our new Horticulturist. An Islander by birth, Oliver grew up in Chilmark where he began his lifelong connection with Martha's Vineyard. Introduced to PHA at an early age, his first Arboretum memory is a field trip with his fourth grade class where he and his classmates had the chance to meet PHA's legendary founder, Polly Hill. He remembers Polly explaining that she, too, was still learning.

After graduating from Martha's Vineyard Regional High School, Oliver's interest in environmental stewardship led him to pursue a bachelor's degree in environmental studies (2013) at Green Mountain College in Poultney, Vermont. Following completion of his degree, Oliver worked in agriculture, renewable energy, construction, and design. He continued his formal education at the Conway School, now located in Easthampton, Massachusetts, obtaining an M.S. in ecological design (2016). After Conway, he left for the Pacific Northwest undertaking



Oliver Osnoss

a two-month creative residency at the North Cascades Institute in Sedro-Woolley, Washington. In the fall of 2016, Oliver returned to Martha's Vineyard and began working in the field of landscape design as well as carpentry and cabinetmaking.

Oliver was drawn to our Horticulturist position for the chance to continue learning about plants and sharing his passion for the natural world. He says, "I am excited to be surrounded by so much knowledge and opportunity." Be sure to introduce yourself to Oliver on your next visit to PHA.

New Exhibit: Art in the Arboretum

The Arboretum inspires artists. While touring the grounds, it's not unusual to find a painter at an easel or a photographer focusing a lens. Our dynamic landscape changes weekly, offering a striking visual experience at every turn. Each observer interprets the large and small scale features—the views, the trees, the flowers—differently.

This summer, in celebration of our 20th anniversary, we are hosting an outdoor art exhibit featuring works inspired by the sights and scenes of the Arboretum. This inaugural exhibit will showcase unique perspectives on PHA's plants and landscapes featuring the artwork of Brooke Bartletta, Becky Brewer, Annie Colangeli, Jocelyn Filley, Leslie Gray, Genevieve Jacobs, Kathy Kinsman, Kanta Lipsky, Marianne Neill, and John Siffert. Weatherproof copies of the original art will be displayed on the grounds where the piece was created, accompanied by an artist's statement. Look for an announcement of the exhibit's opening celebration on our website and in the program brochure.



PHA Hires New Plant Propagator

This past March, Bridget Reed arrived on Martha's Vineyard from Lexington, Kentucky, to join PHA's staff as our new Plant Propagator. In her first few months, Bridget jumped into a busy spring season capably, coaxing to life a new generation of seedlings and developing an improved system for plant sale tags. Her cheery disposition (and delicious baked goods) have been a hit among staff and volunteers.

Before moving to the Island, Bridget had never visited Martha's Vineyard; in fact, she had never been to New England at all! A Southerner by birth, she hails originally from Paducah, a small city in western Kentucky. She moved to Lexington, Kentucky, after enrolling at the University of Kentucky (UKY) where she obtained a bachelor of science in horticulture in 2016. After conducting a research project in sustainable greenhouse production, she found herself gravitating toward greenhouse production as a concentration. She strengthened her passion for horticulture the summer of 2015 through an internship at Walt Disney Parks and Resorts in Orlando, Florida, where over 4,100 acres of gardens are maintained by staff and interns. After graduation she remained in Lexington, working at UKY as a research assistant in the grassland ecology lab and a greenhouse technician in the department of plant pathology.

Executive Director Tim Boland, who got his start in horticulture as a plant propagator, says, "It is great to have Bridget here at PHA. From my perspective as a past grower, she will have unlimited opportunities to grow and know an amazing number of plants." Bridget is looking forward to learning as a greenhouse grower and propagator within the environment of PHA. And as to Martha's Vineyard, she says it's been an adjustment. But by now she is "absolutely in love with the Island." Bridget adds, "I can't get over how I can go for a hike and end up at the beach!" We are thrilled to have Bridget on the PHA team.

Bridget Reed transplants seedlings during her first week at PHA.

Erin Hepfner Awarded Longwood Fellowship

We are excited to share the news that Erin Hepfner, former PHA Visitor Services & Resource Specialist, was accepted into the Longwood Gardens Fellows Program at Longwood Gardens in Kennett Square, Pennsylvania. A 13-month residential learning experience, the program was designed for students who have a passion to lead in a public horticulture environment. We are proud of Erin's achievement as she moves on to the advanced training she desires to become a public garden leader. Of course, we regret losing such a capable and productive member of our team.

Erin was hired in 2013 as a part-time special projects manager. In 2014 she joined our staff as full-time Visitor Services & Resource Specialist. Her passion was connecting people with the Arboretum. Erin was responsible for managing our visitor services and volunteer program, and processing herbarium specimens as part of the Flora of Dukes County project. She was also integral to the interior design of the Education Center and Botany Lab and created the Spring Celebration and Daffodil Show, a popular spring event. Along the way she made friends and garnered admirers among staff, volunteers, and board members.

Executive Director Tim Boland shares the following sentiments: "Public gardens need people who have vision, are curious, and driven to serve society for the greater good and for a greener, healthier world. Erin has the innate talents, aptitude, and dedication to public horticulture to become a leader in the field. I am excited about the prospect of Erin having the opportunity to realize her potential by participating and thriving in the Longwood Fellows Program."

We acknowledge and thank Erin for her many contributions to PHA, including her work on this issue of *Meristems*. Though she left the Island in May, she promises to keep in contact with the Arboretum's community of friends, volunteers, and members. Erin's influence will be on display this summer through the *Art in the Arboretum* exhibit she developed as a way to connect with visitors and celebrate our 20th anniversary.



Erin Hepfner (*center*) with herbarium volunteers (*from left*) Barb Caseau, Dorie Godfrey, Martha Hubbell, and Annie Fischer

Behind the Scenes

Casual visitors may be unaware of what happens in the nursery and maintenance areas that support the Arboretum. Staff and volunteers, however, know that the greenhouses, nursery, and maintenance building are essential to everything we do. Important things are happening behind the scenes! Here's an update:

Last December, a backup generator was installed at the Littlefield greenhouse range to safeguard plants in the event of a power failure. This proved fortuitous as the nursery lost power several times over the course of the winter. The new generator kept the heaters running and the greenhouse plastic inflated, ensuring the survival of our invaluable young plants. An improvement to the Littlefield Maintenance Building was also completed last winter: a large, new bay was added to the west end of the building where grounds maintenance machinery and potting soil can be safely stored out of the elements.

Finally, an exciting change is underway at the Littlefield Nursery thanks to a grant from the Stanley Smith Horticultural Trust. The funded proposal includes a complete renovation of the fenced-in growing area, converting it from a traditional field nursery to a "pot-in-pot" container operation. This conversion will dramatically reduce the amount of time required to water, weed, and transplant trees. Pot-in-pot systems, where plants grow below ground in a pot that rests inside another pot, combine the advantages of field growing with the convenience of above-ground growing.

Thomas Murphy Pursues Graduate Degree

In February we bade goodbye to curatorial intern Thomas Murphy, who had been with us since May of last year. During Thomas's time at PHA, he made major contributions to our botanical and scientific work, including organizing our herbarium specimens and initiating a research project on stewartia propagation.

Thomas is on to his next professional chapter, this one at Austin Peay State University (APSU) in Clarksville, Tennessee, where he will pursue a master's degree. Thomas was awarded the Mt. Cuba Center Graduate Fellowship in Eastern American Botany through APSU's Center of Excellence for Field Biology. The fellowship entails the taxonomic study of a group of Clematis species native to the southeastern U.S. called the American leather-flowers. As part of his work, he will travel to collect herbarium vouchers, seed, and photographs. Plants will be grown for study at APSU and later brought to Mt. Cuba Center (a botanical garden in Hockessin, Delaware) to create an official collection. His results will provide insight on plant diversity and how taxonomy can be used to promote conservation.

Although Thomas only arrived at APSU this March, he was already busy planning fieldwork, building a raised bed for his plant collections, and devising his thesis a few weeks later. In an April email he reported, "I just got back from a collecting trip to Alabama, Florida, Georgia, and South Carolina ... I traveled 2,000 miles in 6 days!" We look forward to updates as he continues his botanical travels in search of native leather-flowers.



Thomas Murphy climbs a loblolly pine in PHA's Holly Park.

Habitat Kids Grow Native Plants

PHA has recently adopted an in-school conservation education program called Habitat Kids. The program aims to inspire and train Island children to become environmental stewards within the Vineyard community. The Habitat Kids curriculum was developed in 2015 by PHA Visitor Services, Volunteer & Youth Education Coordinator Kendra Buresch with support from a Martha's Vineyard Vision Fellowship. Kendra was awarded the fellowship to develop Habitat Kids as a pilot program in collaboration with the Nature Conservancy, PHA, and BiodiversityWorks.

Through the Habitat Kids curriculum, students learn about our local ecosystems, how they are degraded by habitat fragmentation, and how planting backyard habitat patches can help to restore ecosystem functionality. One of the unique aspects



Tisbury School third graders sow native plant seeds with PHA Youth Education Coordinator Jill Bouck.

of this program is that it directly engages students in conservation efforts. This year's students are sowing native plant seeds to be grown into saleable plants marketed as Habitat Kids Plants. Habitat Kids Plants will be sold at PHA's plant sale area to motivate community members to create their own backyard habitat patches. We are encouraging students to visit PHA with their families this summer to see the plants they helped cultivate.

Welcome Summer Interns

Horticultural internships benefit both PHA and the interns, and have furthered the education and careers of many students. The Arboretum is grateful for the support of the Feldman family in continuing their generous funding of our invaluable summer internship program. This year, we welcome Samantha Snyder and Nicole Achor as our 2018 summer interns. Samantha has completed her sophomore year at Virginia Tech in Blacksburg, Virginia, where she is pursuing a degree in landscape architecture with a minor in horticulture. She welcomes the opportunity to learn plant selection skills to advance her landscape design work. Nicole Achor recently finished her freshman year at Purdue University in West Lafayette, Indiana, where she is studying public horticulture. Nicole is interested in combining plants with community engagement. She appreciates PHA's role as "a living educational tool." Both Samantha and Nicole look forward to familiarizing themselves with the plants in our collection.

New Wildlands and Woodlands Report

In 2010, PHA research associate Dr. David Foster and colleagues advanced Wildlands and Woodlands – A Vision for the New England Landscape, which laid out an ambitious plan for the protection and conservation of forest and farmland across the region. Dr. Foster is director of Harvard Forest, a 3,000-acre ecological research site, and has extensively studied the health of Martha's Vineyard's forests. An updated *Wildlands and Woodlands* report was published in 2017, authored by David Foster, along with 30 other scientists, conservationists, urban planning experts, and environmental historians. The report broadens the perspective of the 2010 report to connect both forests and farms to climate resilience and economic sustainability. Its specific findings report that New England has been losing forestland to development at a rate of 65 acres per day. The authors identify emerging opportunities for gaining ground based on New England's remarkable conservation capacity. The full report can be found at wildlandsandwoodlands.org.

Grant Money Funds Youth Education

Thanks to the hard work and dedication of Visitor Services, Volunteer, and Youth Education Coordinator Kendra Buresch, we have received a number of generous grants in support of our youth education programs. We are grateful to the following foundations and granting agencies for their support:

The Edey Foundation — \$5,500

This grant will be used for the development of a middle school plant conservation curriculum. The curriculum will focus on four areas encompassing both global and local conservation issues: climate change, trees, and resiliency; tree conservation at PHA; habitat fragmentation and environmental stewardship; and oak ecology.

Cape Cod Five Foundation — \$2,250

This funding will allow PHA to hire a high school intern to assist with overseeing the Habitat Kids schoolyard habitat patches at several elementary schools this summer. The high school habitat steward will also help with Habitat Kids classroom materials.

Massachusetts Cultural Council — \$4,600

Co-authored with the Martha's Vineyard Museum (MVM), this grant provides funding for a Habitat Kids educational collaboration with MVM that uses the story of the heath hen to raise awareness of critical issues facing our Island's ecosystems.

Massachusetts Local Cultural Council — \$1,028

The "Kindergarteners for Monarchs" grant will fund the Habitat Kids program to work with kindergarten classrooms in the fall of 2018 as they restore monarch habitat by collecting and packaging milkweed seeds to be distributed to the Island community.

Permanent Endowment Fund — \$2,500

This grant is being used to fund the Habitat Kids third grade programming for the 2017/2018 school year.

Curatorial Intern Katherine Brewer

2018 curatorial intern Katherine Brewer arrived at the Arboretum in April having recently completed a plant records internship at Longwood Gardens in Kennett Square, Pennsylvania. Katherine graduated from University of Vermont in 2016 with a bachelor of science in sustainable landscape horticulture and a minor in religion. During the summer after her junior year, she interned at the Jenkins Arboretum in Devon, Pennsylvania. The following summer she began working as an outdoor display intern at Longwood Gardens, moving on to the plant records internship that fall. During her time at Longwood, she assisted with a major revitalization of their main fountain garden, including mapping, inventorying, and verifying the plants used in the project.

In her first week at PHA, Katherine had already learned how to use our new plant records database, IrisBG, and had begun accessioning new plants into the collection. Like Arboretum founder Polly Hill, she has a partiality for ericaceous plants. The Arboretum's collections feature many special and rare members of the heath family (Ericaceae), including the genera Rhododendron, Enkianthus, Kalmia, and Pieris, making PHA an ideal place to pursue her interest. In the future, Katherine plans on a career in public horticulture. She looks forward to bringing her experience in plant records to PHA while continuing to learn more about the management of plant collections in public gardens.



Katherine Brewer

Summer Program Preview

This summer we bring a wide range of speakers to PHA to share their expertise. Our annual summer lecture series begins in June with "Insects: the Ancient Ones," given by expert entomologist Nathan Erwin. Nate will tell fascinating stories of the evolution of arthropods, illustrated with close-up images of familiar (and not-so-familiar) insects. He will also offer a family program on backyard bugs.

If you love trees, you won't want to miss July's annual Frank and Lisina Hoch lecture to be given by Paul Meyer, executive director of the Morris Arboretum of the University of Pennsylvania. Paul will share stories and pictures of the great and ancient trees he discovered during his travels in North America, Europe, and Asia. Later in July, Island ecologist Matthew Pelikan will present on butterflies of Martha's Vineyard, and Brie Arthur, author of *The Foodscape Revolution*, will speak about her signature design technique of foodscaping, a sustainable landscape practice pairing edibles with ornamental plants.

August begins with a presentation on gravel gardening by Lisa Roper, horticulturist for the last 26 years at the renowned public garden Chanticleer in Wayne, Pennsylvania. Lisa maintains and manages Chanticleer's Gravel Garden, a sloping site planted with a mix of grasses, Mediterranean plants, drought-tolerant perennials, seedgrown annuals, and hardy succulents. Also in August, Vineyard Conservation Society's executive director, Brendan O'Neill, will present the annual David Smith memorial lecture. Brendan will reflect on decades of conservation successes-including the preservation of PHA-and setbacks on Martha's Vineyard as well as conservation prospects for the next half-century. In late August, we welcome back wildlife ecologists Luanne Johnson and Liz Baldwin of Biodiversity-Works to present their work monitoring and protecting threatened populations of bats on the Island and how private lands and homes can play a role in their conservation.

September brings the final lectures of the season: Dan Jaffe of the New England Wildflower Society in Framingham, Massachusetts, and horticultural designer Patrick Cullina based in New York City. Dan Jaffe



Paul Meyer, executive director at the Morris Arboretum, will present "Great and Ancient Trees of the North Temperate World." Photo: Nick Kelsh

will give the featured lecture at our fall plant sale, speaking on the topic of his new book, *Native Plants for New England Gardens*; and Pat will give a talk titled "Island Hopping: Landscape Design Lessons from Manhattan to Maine" covering site design and plant selection on his current projects in New York City, along Boston Harbor, on Long Island, and on a private island off the coast of Maine. We are appreciative of this year's lecture series sponsors: Bartlett Tree Experts, Donaroma's Nursery and Landscape Services, Dukes Conservation District, Heather Gardens, Island Grown Initiative, Middletown Nursery, and SBS: The Grain Store.

This season also brings a variety of classes and special tours. We are offering a floral watercolor series with Lynn Hoeft and a nature drawing series with Lizzy Schule. In August, landscape architect Allan Summers will run a design workshop for professional and hobby gardeners using PHA as a template. Staff-led programs include fruit tree pruning, plant propagation, and our popular Edgartown tree tours. And finally, in celebration of our 20th year as a public garden, PHA staff will present a series of talks and tours on the theme "Twenty Iconic Trees of the Arboretum"—from the ancient dawn redwood to the remarkable Julian Hill magnolia, participants will discover new insights into PHA's special trees. We hope you can join us! For dates, details, and our complete summer schedule, look for our summer/fall program guide mailing or visit our programs calendar at pollyhillarboretum. org. More events and classes will be added throughout the season. To receive email updates, subscribe on the homepage of our website.



The flowers and fruit of the Eastern redbud, Cercis canadensis

I owe my affection for redbuds to my grandfather Thomas McShane who introduced me to gardening when I was a teenager. Every spring he and my grandmother would drive south from Michigan to visit family in Virginia. This annual trip sparked his love of the eastern redbud tree (Cercis canadensis), which blooms red violet in the Virginia woods alongside the white flowers of flowering dogwood (Cornus florida). Back in Michigan, my grandfather initiated what became a tradition: he and I would visit a local nursery, buy redbud trees, and plant them together for friends and relatives. It was my first time experiencing the satisfaction of planting trees for others. Now, looking back on my 30-year-plus tree-planting career inspired by my grandfather's example, lots of gift trees-redbuds, dawn redwoods, stewartia, beeches, and more-grow in the gardens of my family and friends.

The eastern redbud's magenta pink to rosy lilac flowers, resembling tiny sweet peas, open before the leaves in spring (mid- to late May on Martha's Vineyard). Attractive in bud, the flowers are a stunning sight when fully opened. Older branches often have a profusion of stemless blooms clustered along larger branches and trunks, emerging directly from the bark. This unusual trait is called cauliflory, a botanical term that translates to "stem flower."The flowers fade, forming pods that are similar in appearance to a flattened peapod, the distinctive fruit of the pea or bean family (Fabaceae) to which redbud belongs. Eastern redbud has an extensive natural range, occurring in North America from Connecticut to New York to southern Ontario and the Great Lakes, south to western Texas and Florida. World-



'Ruby Falls' is a purple-leaved, weeping hybrid redbud. Photo: Mark Weathington

wide the genus *Cercis* contains 7 to 13 species (or subspecies) found in North America, Asia, and Europe.

As a small flowering tree, redbuds have gained the attention of plant breeders who recognize the potential for new flower and leaf colors. As a result, the gardener has many diverse and colorful choicesknown as cultivars-within the redbud clan. One way a new redbud cultivar might be discovered is when trees with variable flower coloration are located in the wild. A form called 'Alba' has been found in many parts of redbud's natural range. I witnessed such a tree once along the Kalamazoo River in southern Michigan. My favorite whiteflowered cultivar, 'Royal White', flowers heavily on a vigorous tree. Its sparkling white flowers brighten the landscape and contrast well with the darker bark of older specimens. A spontaneous seedling is another way variation can occur. An example of this is the beautiful pale pink-flowered cultivar, 'Pauline Lily', that was discovered in the woods of West Virginia and later made available commercially. Perhaps the most popular newcomer is 'Appalachian Red' with its bright neon-pink flowers. Whatever the flower color, it's worth mentioning that the flowers are edible and can be added to salads, cereals, or any dish that needs an attractive garnish.



Oil painting by artist Ingrid Finnan Courtesy and copyright the artist



'Hearts of Gold' has vibrant yellow foliage. Photo: Mark Weathington

The heart-shaped leaves of eastern redbud are also attractive, and today's cultivars offer foliage colors from purple, orange, and white variegated to a remarkable yellow-foliaged form called 'Hearts of Gold'. The toughest of the colored-foliage group is 'Forest Pansy', a vigorous purplefoliaged cultivar; its leaves open purple-red and change to a purple-tinged dark green by late season. Beyond the exciting flower and foliage colors, novel cultivars often combine both on a weeping form. A popular weeping selection named 'Covey' reaches only 4 to 6 feet at maturity and fits beautifully in small spaces. The recent introduction 'Ruby Falls' combines the colored foliage of 'Forest Pansy' with the weeping habit



Cauliflory, the peculiar stem flowers of redbud

of 'Covey' to produce a startlingly beautiful, weeping tree with dark-purple foliage. Plants grow to 8 to 12 feet at maturity and about 4 to 8 feet wide.

On Martha's Vineyard, successfully cultivating redbud is not without challenges. It prefers moist, organic, well-drained soils —a rare commodity on the Island. Nevertheless, it's worth accommodating this special tree with extra care and a choice spot. To get young redbuds off to a good start, plant in full sun or light shade and add organic compost to the planting hole. To counter the strong acidity of our soils, add lime each spring to the root zone. Redbuds may form a multi-stemmed tree ranging from 20 to 30 feet in height and width, but as noted above, many new smaller selections are now available. This year in honor of Arbor Day at PHA, we planted a redbud grown from wild-collected seed harvested from trees in Alexander County, Illinois. Perhaps you'll start your own tree-planting tradition, whether it be redbuds, dogwoods, or any other of the beautiful flowering trees that grace PHA's collection.



The neon-pink flowers of 'Appalachian Red'

The Lifecycle of a Living Collection

by Todd Rounsaville

It's a common practice to describe an arboretum as a "museum for trees." It makes sense; the plants are collections that are curated, interpreted, studied, and opened to the public. In this way, plants (like artifacts, paintings, and sculpture) are treated as objects to be classified and arranged within greater collections. Nevertheless, arboreta differ greatly from museums in that their collections (plants) grow, and continually *change* over time.

The process of acquiring and formally entering a new plant into the collection is known as accessioning. At PHA, like at most gardens, a collections policy guides the type of plants permissible for new accessions. The collections policy is essential to focus our acquisition efforts, since there are some 250,000 known plant species on Earth, and an incalculable number of cultivated forms. Our PHA target list includes taxonomic-based groups such as Ilex (hollies), Rhododendron, and Magnolia that perform well on Martha's Vineyard and represent historically significant holdings. Though not mutually exclusive, geographic collections, particularly those of eastern North America and Japan, are especially important to us. PHA holds the nationally accredited collection of Stewartia, a genus of trees in the tea family (Theaceae) that have an eastern North American and eastern Asian distribution. The cultivation of unique Stewartia species within one site is a useful way to study plant diversity and evolution, as well as aid ex situ (off-site) plant conservation efforts.

Sourcing these plants (especially with conservation in mind) requires making collections from wild populations so that the specific origin of each plant can be documented. Ongoing seed collecting expeditions to the aforementioned areas help supply new germplasm for the living collection. PHA is also fortunate to participate in seed sharing with other institutions to aid our acquisition goals. Seed-grown plants reward those that are patient, something Polly Hill inherently knew. From seed we can grow plants with interesting and often novel diversity (plant form, flower color, etc.), and in some ways we (like Polly) end up selecting plants with a natural proclivity for the Island climate.

In as little as a year, but sometimes over a decade, plants grown from seed become large and resilient enough to be planted into the living collection. Their placement into the collection is based primarily on site so that the soil, moisture, and light conditions can be matched to the needs of each specimen as closely as possible. Once in the ground, plants are cared for and evaluated as if they will last in perpetuity, though, of course, they will not.

The act of removing a plant (accession) from the collection is aptly called deaccessioning. Deaccessioning can occur for a number of reasons, including natural death, storm damage, or simply poor performance (some plants do not take to the Island climate). In other examples, perfectly healthy plants may also be deaccessioned. In the case of cultivated forms, there may be new and improved cultivars released by plant breeders. Such is the case with new butterfly bush (Buddleja) cultivars that have been bred for sterility, since there is a tendency for invasiveness in this group. For true species, a plant of documented wild origin is more valuable than one of unknown origin. Space is always a limiting factor, thus we cannot make room for everything. In some instances, a truly valuable plant in decline will be "re-propagated," so that while the mother plant is lost, a duplicate (clone) is entered under a new accession to preserve the genetic identity.

A critical component of deaccessioning is the archival of all associated records. Thus although the physical plant is removed and discarded, the records and data remain forever accessible. In this way we can look back to see which species struggle here, and make informed choices about future plantings. PHA's "dead" file (records for deaccessioned plants) dwarfs the current "living" file, and this disparity will only increase over time. It is humbling to look back through the deaccession files and see drawers full of "plants" that exist only as a paper memory. In all of the records are innumerable efforts to collect, germinate, cultivate, and document plants from around the world. They are documentation of past successes and failures, and a record of the continually improving collection of living plants at PHA.

Meadow Restoration Project

The PHA meadows are an important asset, providing dramatic vistas throughout the collection, habitat for native fauna, and a reminder of the property's history. A multi-year management strategy to improve ecosystem health is underway for the approximately 4.5 acres of meadow on the Arboretum grounds. The primary challenge faced when managing a meadow is preventing the natural succession to forestthe encroachment of woody plants occurs with both natives (winged sumac, poison ivy, oaks) and exotics (Asian bittersweet, autumn olive, crabapple) competing with herbaceous plants for resources. Our goals are to greatly reduce woody plant volume in the meadows and to create a condition favorable to Island-native grasses and wildflowers.

In the fall of 2017, a one-acre test plot in the North Field was subjected to an extremely low-cut mowing. The timing of this activity was critical: before the woody plants went dormant (to starve the roots of aboveground carbon reserves), yet after the native wildflowers had gone to seed. All the biomass (stems and leaves) was raked and removed from the meadow. Though it seems counterintuitive to remove nutrients (the cut biomass) from the site, native species that are adapted to these nutrient-poor soils should be more competitive compared to exotic invaders. Our grounds volunteers planted nearly 1,000 "plugs" of seed-grown Island native plants into the closely mown meadow.

In the years to come, this mowing/ planting regime will steadily reclaim and improve the meadows. Our goal is not to recreate a specific Island ecosystem, but rather to incorporate native species into a healthy, sustainable, and beautiful plant community.



PHA staff and grounds volunteers plant native grasses and wildflowers in the North Field.

PHA Partners with the West Tisbury Library to Replace Trees

In 2015 PHA collaborated with the West Tisbury Public Library on landscape plantings around the newly expanded library and parking lot. Developed with environmentally informed landscape practices, gardens based on the principle of "right plant, right place" now surround West Tisbury's beautiful new library. The garden landscape and its interpretive signage serve many roles: aesthetic, environmental, and educational.

One challenge arose in the beginning of the project, which led to a lively debate: the proposed removal of a group of Norway maple trees bordering the parking lot. These "volunteer" trees were not intentionally planted. Norway maple, an invasive plant known for its prolific seeding, is on the Massachusetts Prohibited Plant List. Norway maple's aggressive roots can lift sidewalks and pavement. In addition, they release allelopathic chemicals that prevent other plants from prospering within its root zone. The presence of the trees are not conducive to the establishment of a successful garden. It was agreed that a gradual removal (over a three-year period) of the offending trees would resolve the problem.

The proposed tree removal will require a redesign of the area. Executive Director Tim Boland collaborated with the West Tisbury Library Foundation to obtain a Edey Foundation grant to fund the design and installation. Tim is working together with local landscape designer Lil Provence to create a plan for a mixed planting that includes sugar maples, ornamental flowering cherries, and a host of non-invasive shrubs and perennial plants. The tree removals and new plantings will take place over the next six to twelve months.

VOLUNTEERS IN THE ARBORETUM



Jack and Linda Korpi

Linda and Jack Korpi

Linda and Jack Korpi discovered PHA by chance when they pulled in on a whim 7 years ago. In the parking lot, they were at once enticed by the tranquility and decided to explore the grounds. They recognized immediately that the landscape was maintained by people who truly cared for the plants and the sense of place. Although our landscape is not highly manicured, the Korpis observed that plants were the focal point. On subsequent walks, they chatted with friendly grounds volunteers; it was then that the seed of volunteering was planted for Jack.

Linda and Jack yearned to learn more about the Arboretum and subsequently went on every tour they could, regardless of the season. Linda recalls with a smile a winter walk led by our then Curator, Tom Clark. In addition to guiding the group through icy conditions with aplomb, Tom created a welcoming sense of community among strangers and educated the guests on the wonders of a winter garden, neither of which is an easy task. This impressed the Korpis.

Jack became a grounds volunteer, and soon Linda was considering volunteering, too. With her engaging personality and outgoing nature, she is well-suited for staffing the Visitor Center. As she continued to learn about the legacy of PHA to share with visitors, she began to feel the Arboretum story become a part of her. Now she delights in interacting with guests to help them get the most from their visit. Linda also assists with school group tours. Her favorite memory: after leading a fun, interactive tour for a group of students, the bus windows came down and the kids called out, "Bye, Miss Linda!" as they departed the parking lot.

When Linda and Jack are together, they are full of love and happiness. Their genuine interest in others and positive spirits leave people with a smile, not just on their faces, but in their hearts. The Korpis are not only hardworking and lighthearted, they also have great senses of humor. They take plants seriously, but not too seriously. Inspired by the plant collection at PHA, they have their own collection at home. And their plants have names. Buddy is a redbud, and Father Gilla-did you guess it?-he's a fothergilla. Then there's Esther the sweetshrub (Calycanthus). She's planted in a prominent location so they can check in with her regularly. If you have a chance to meet the Korpis, be sure to ask them about their personal relationships with their plants!

When reflecting on volunteering at the Arboretum, Linda notes how dedicated the volunteers are to PHA. Jack observes that the dedication comes from an appreciation that starts with a personal connection. Hundreds of individuals have given their time and skills to the programs and landscape at PHA, but what they share with each other, visitors, and staff is so much more. The rewards of the conversations, education, mutual support, and laughter that take place is beyond what words can convey. You have to feel it. As Jack says, "If you feel a connection to the Arboretum, consider volunteering; it will only get stronger, and better!"

The staff at PHA thanks the Korpis and all our volunteers for their continued support. To inquire about volunteering, contact Volunteer Coordinator Kendra Buresch by email at kendra@pollyhillarboretum.org or by calling 508-693-9426.

THE POLLY HILL ARBORETUM

MAILING ADDRESS PO Box 561 West Tisbury, MA 02575

508-693-9426 Tel 508-693-5772 Fax www.pollyhillarboretum.org

ADMINISTRATIVE OFFICES The Homestead 809 State Road West Tisbury, MA 02575

VISITOR CENTER 795 State Road West Tisbury, MA 02575

ACCESSIBILITY The Visitor Center is wheelchair accessible.

VISITOR CENTER HOURS Memorial Day weekend to Columbus Day: 9:30 am-4 pm ARBORETUM GROUNDS HOURS Sunrise-sunset, year-round

TOURS Daily July and August at 10 am, or by advanced reservation

ADMISSION \$5 Free to members and children under 12

FREE PARKING

DRIVING DIRECTIONS See www.pollyhillarboretum.org

mer.i.stem: *n. botany*. The growing point or area of rapidly dividing cells at the tip of a stem, root, or branch.

ARBORETUM DESTINATIONS



THE POLLY HILL ARBORETUM

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Erin Hepfner (then Visitor Services & Resource Specialist) shares the Polly Hill Arboretum story with a tour group.

Our First Plant Accession

On the occasion of our 20th anniversary, it's fitting to feature one of the Arboretum's most iconic treesthe upright European beech (Fagus sylvatica 'Fastigiata'). A distinctly columnar tree, this elegant beech can be found adjacent to the Far Barn entry steps. In contrast to the other

wide-spreading and pendent European beech cultivars that grace our grounds, this tree's narrow habit allows it to fit comfortably between the Far Barn and adjacent Slaughterhouse. Received in 1958 from the Sherwood Nursery Company, the tree was our very first recorded plant accession! On

Arboretum tours, this beech provides the opportunity to share the story of Polly Hill's devotion to plants and plant records that led to our establishment. The label reads 58-001, which indicates it was the first tree recorded on our grounds by Polly Hill in 1958.



The distinctive upright habit of Fagus sylvatica 'Fastigiata'