Meristems

The Polly Hill Arboretum West Tisbury, Massachusetts

Vol. 23, No. 2, Fall 2021

Little bluestem (Schizachyrium scoparium), an Island native grass, flourishes in the PHA meadows.

Arboretum Receives CAP Funding for 2022 Review

In its most basic definition, an arboretum is an outdoor collection of trees and shrubs-a museum of living specimens. And although we know PHA is much more than that, we take seriously the work of caring for our collections. Like in a museum, they must be managed in accordance with standard practices, as well as with thoughtful attention to the ways in which they are unique. The Polly Hill Arboretum is pleased to be awarded funding for an updated Collections Assessment for Preservation (CAP), a grant administered by the American Institute for Conservation (AIC) under a cooperative agreement with the Institute of Museum and Library Services (IMLS). This grant is designed to help small and mid-sized institutions better care for their collections.

The CAP assessment entails a review by

visiting consultants of an organization's collections, buildings, and building systems, as well as its collections care policies and procedures. The result is a comprehensive report that includes recommendations for improvements to infrastructure and operations. In addition to museums and public gardens/arboreta, the IMLS awards grants to aquariums, nature centers, planetariums, zoos and historic houses. PHA received its first CAP assessment in 2001, a second in 2008, and an interim review of our progress, known as RE-CAP, in 2011. We look forward to again hosting CAP assessors at Polly Hill Arboretum in 2022.

CAP reviews are helpful in long range planning and in determining best practices in modern-day collections care. They can also aid in planning for fundraising and grant opportunities for future projects. Tim Boland, PHA Executive Director, says "These valuable assessments have helped us to accomplish our 'big dreams'—a greenhouse, an herbarium, a research library, Polly Hill's archives; none of these existed in 2001 when we had our first assessment. We listened to the recommendations of our peers for staged, prioritized planning for exemplary collections management, and we now have these vital institutional resources."

Tim also notes, "The CAP process involves staff, Board members, and volunteers who actively work in our living plant collections (grounds and greenhouse) and non-living collections (herbarium, archives, and research library). We are excited to be involved with this review and look forward to working with IMLS once again."

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The Polly Hill Arboretum

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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 eniowment of all.

Meristems © The Newsletter of the Polly Hill Arboretum

News & Photography PHA Staff Editor Ann Quigley Design Lorraine F. Weinberg Printing Bolger, Minneapolis MN Printed on recycled paper.



Staff replace plastic on one of the PHA greenhouses.



A red-tailed hawk stops by the Visitor Center.



Visitors learn about meadow plants with PHA Plant Recorder Liz Thomas.



Fall colors among the beetlebung trees



Abra Lee lectures on the historical and cultural significance of trees in our Far Barn.



Students in a nature drawing class take in the sights.

Message from the Director: A Reunion of Trees and People

My older sister, a scientist, sent me a sticker at the beginning of the pandemic that said "Even in strange times, the plants still grow." They do indeed, and so did the Polly Hill Arboretum!

The summer of 2021 will always be remembered as the great semi-awakening. While we waited patiently for spring (as always on MV), we also received the final go-ahead from the West Tisbury Board of Health to reopen buildings to the public as federal, state, and local restrictions eased to pre-pandemic levels—almost.

At the Visitor Center, weekend staffer Carol Swiech and our friendly volunteer docents welcomed folks back, enthusiastically sharing information to make sure that visits were as enjoyable and informative as possible. Our new mission-driven interpretive panels in the Visitor Center were a hit, visually sharing engaging stories about our core values of plant conservation and research, education, and the preservation of our historic landscape and buildings.

Grounds volunteers, guided by Grounds Manager Ian Jochems and Horticulturist Oliver Osnoss, came out in large numbers each week to complete many improvements, including planting a new Far Barn perennial border and assisting with the installation of fresh plastic on the propagation greenhouse.

Customers were excited to once again shop in person at our fall plant sale—getting tips on plant selection and care from our volunteers and staff, and chatting with other plant lovers while enjoying the beauty of the Arboretum in autumn. In addition to our in-person sale, we also offered MV Wildtype native plant plugs sold online for pickup.

We were glad to have new Youth Educator Sonja Josephson join PHA this fall, just in time to help us share this amazing outdoor laboratory with hundreds of Island students. We are also happy to announce Emily Ellingson as the new Curator/Assistant Director. Emily is a natural fit with our talented staff, having been a PHA Curatorial Intern in 2013. Welcome Sonja and Emily!

In this edition of *Meristems*, you will read about two new Board members and three long-term Board members who are retiring after several years of professional leadership. The Arboretum is a place of constant change and renewal and we thank our members and supporters for our growth.

Semochy M. Bolo

Southern Wonders: A Seed Collecting Travel Log

Tim Boland, Executive Director:

One of the disappointments of the COVID-19 pandemic here at PHA was the need to cancel seed expeditions planned for 2020, and as the pandemic loomed, we wondered if we would ever be able to get out exploring again. So it was exciting when, this spring, we were able to begin planning once again for a trip to the American Southeast! Organizing a seed collecting trip is a complex proposition: The first order of business is to list your target plants, then obtain the proper permitting, and when possible, find a seasoned local botanist or land manager who can help you locate specific populations of plants. PHA Plant Recorder Liz Thomas and I took on the challenge, and before we knew it, we were touching down in Tallahassee, Florida, our home base for the first segment of our trip. Between September 9–13, we traveled from the Florida Panhandle north to Alabama, then east to Georgia, where we wrapped up our expedition.

Elizabeth Thomas, Plant Recorder:

The main targets of our trip were two North American native species: The silky camellia (*Stewartia malacodendron*) and the mountain camellia (*Stewartia ovata*). The flowers of these deciduous trees resemble the blooms of camellias, as their common names indicate, and while they are in the same family as the familiar garden flower, they belong to a separate genus. PHA holds the accredited national collection of stewartias, and it's important for us to aid in conservation efforts for this genus. Both of the North American stewartia species are understory trees found only in forests of the southeastern US, and have conservation statuses ranging from "vulnerable" to "critically imperiled" in most states where they occur.

Silky camellia is primarily found on the coastal plain, growing on the slopes of sandhills or rich ravines, while mountain camellia has a more central distribution in the moist hardwood and bluff forests of the lower Appalachian Mountains and Piedmont Plateau. Although its range stretches along the coast from Virginia to Texas, we decided to target silky camellia in the panhandle of Florida and adjacent southern Alabama. These populations are both underrepresented in cultivated collections and at a higher risk of natural habitat destruction due to development, hurricanes, and other climate changerelated risks. Conveniently for us, this region is also home to the red-listed (i.e. of conservation concern) bluff oak (Quercus austrina), which we also planned to seek out.



Michael Jenkins, Elizabeth Thomas, and Tim Boland explore the pine flats and deep ravines of Lake Talquin State Forest in Florida.



The exceptionally large fruits of silky camellia, found in the panhandle of Florida

FLORIDA Days 1, 2, 3

Tim: The Florida Panhandle is renowned for its abundant state forests and nature preserves. On the first day of our expedition, we met up with legendary oak man Ron Lance at Edward Ball Wakulla Springs State Park, just a few miles west of Tallahassee, Florida. The objective was to collect seeds from the vulnerable bluff oak. Ron met us in the parking lot, and within minutes he led us to some immense trees, some with trunks measuring at least 130 inches in circumference. Their acorns ripen later in the season than stewartia seeds, but we were able to gather some early fruits to bring back to the Arboretum, as we hope to become a steward of this species for the Global Conservation Consortium for Oaks.

Liz: After Wakulla Springs, we headed to Torreya State Park to check out a stewartia population that Tim had seen on a previous trip. We had heard the park had been hit hard by Hurricane Michael in 2018, but we weren't prepared for the devastation that still remained three years later. As we approached the park, we found ourselves driving through a barren landscape where there had once been forest, each side displaying piles of massive tree trunks and other forest debris which had been bulldozed in a post-apocalyptic tidying job. The entire area had been leveled by the 165 mph winds of the Category 5 hurricane. Inside the park, which had previously been a shady respite from the Florida sun, the overstory was largely gone, which does not bode well for sun-shy trees like stewartia. With the guidance of Ron Lance, we managed to find some remnant shady slopes, where we found an interesting understory of eastern leatherwood (Dirca palustris) but alas, no silky camellia. As fruitless as our visit to the park was, it cemented our conviction that these gulf coast populations are important to sample sooner rather than later by reminding us how just one storm could destroy an important pocket of genetic diversity. If the hurricane had shifted 20 miles to the east, the thriving population we sampled the following day at Lake Talquin State Forest would have been flattened. Each year brings close calls with such storms, reminding us that even protected conservation land is still vulnerable to habitat destruction.



Liz and Ron measure the trunk circumference of a bluff oak.



A rare meeting of several seasoned plantspeople *From left:* Ron Miller, Tony Aeillo, Peter Zale, Tim Boland, Elizabeth Thomas, Curtis Hansen, Ron Lance, and Patrick Thompson

Tim: Our next destination, Lake Talquin State Forest, was created by a hydroelectric dam project in 1927. The area is an expansive 15 square miles, much of it shouldered by the ravine habitat silky camellia prefers. Here we were joined by Michael Jenkins, Plant Conservation Biologist at Florida Forest Service, and volunteer naturalist Bob Farley. The morning started with a hike down to the lake, which included several steep slopes and some sporadic encounters with silky camellia. We were fortunate that the morning brought us to some sunny eastern slopes, where we found some fruiting trees in the understory. That afternoon we wandered through thick, shady vegetation, encountering beautiful southern magnolias (Magnolia grandiflora) but not many stewartias in fruit. Although most of the stewartias were fruitless, we took notes on their condition and documented their health in case we return to collect in the future. Without Michael's guidance, we could not have found these populations.

The next morning's destination was an unusual one: a long-abandoned planned subdivision in Florida's panhandle. Traveling to this site was like passing through a ghost town—all the roads still evident, but no buildings! It was here at a river slope location that we encountered silky camellias with the largest fruits we have ever seen, some nearly the size of golf balls! That was when true "stewartia euphoria" set in.

In the latter half of the day we met

another legendary plantsman, Ron Miller, at Blackwater River State Forest in Milton, Florida. Ron and I have been pen pals for several years, our communications chiefly based on a mutual affection for native southeastern flora. The afternoon's travels took us from upland pine plantations into swampland. Along the way, Ron pointed out rare plants and we found and collected seeds from the unique evergreen shrub known as sand myrtle (*Kalmia buxifolia*).

SOUTHERN ALABAMA Days 4, 5

Liz: Our collection boom in Florida was followed by a bust in Alabama; we found our target species, but without fruits to glean. No matter, though; the planets aligned, and we found ourselves botanizing with an all-star crew of plantsmen in beautiful, varied landscapes. Curtis Hansen, Curator at Auburn University's Freeman Herbarium in Auburn, Alabama, led our crew, which had grown to include Patrick Thompson from the Davis Arboretum also at Auburn University, the two famous Rons, and Peter Zale and Tony Aiello from Longwood Gardens in Kennett Square, Pennsylvania. We skirted tupelo and cypress swamps, climbed up slopes of iron-encrusted sandstone, and scrambled down limestone outcrops. The crowning jewel of our two days in Alabama was an impromptu trip to a truly magical, awe-inspiring bog, with pitcher plants of every color as far as the eye could see.

GEORGIA MOUNTAIN TIME Days 6, 7, 8

Tim: Several of PHA's previous expeditions in search of the mountain camellia (*S. ovata*) have taken us to the mountains of north Georgia, specifically the Chattahoochee National Forest. We were thrilled to once again have the company and assistance of Jack Johnston, whom I refer to as the stewartia whisperer. Residing in nearby Clayton, Georgia has led him to a lifelong devotion for finding and collecting both American native stewartia species. Each time I travel with Jack, I learn more about the specialized ecology where these trees grow, and strategies for propagating them from seed.

Liz: We'd never collected in Smithgall Woods State Park before, a 5,000 acre park outside of the quaint resort town of Helen, Georgia. Surprisingly, neither had Jack, but his uncanny ability to read the terrain had him leading the way to our target mountain camellia population. We found success at Smithgall, and again at a second location within the Chattahoochee National Forest, about 15 miles to the east. We brought home our favorite souvenirs from that day of collecting: two sourwood sticks fashioned into hooked stewartia harvesting tools, made by Jack.



Crawford Bog in Alabama's Conecuh National Forest



A baldcypress and tupelo swamp at Solon Dixon Preserve in Alabama

Essentially strong, straight canes with the nub of a branchlet left at one end, the higher stewartia branches could be hooked and flexed downward to allow for harvesting the fruit without damaging the branches. Satisfying in their rustic practicality, they would have come in handy during the first leg of our trip!

Returning to the Island with an abundance of seed from our target species, we declared the trip a success, made possible by many parties to whom we are massively grateful. We thank the Plant Collecting Collaborative, who helped fund our travels, and the myriad people who assisted with the permitting process, site selection, and guidance in the field.



A stewartia harvesting tool fashioned from a sourwood stick

PHA Welcomes New Youth Educator

Sonja Josephson joined the PHA staff as Youth Educator in early October. In her new role, Sonja will be assisting Education Coordinator Liz Ladwig to plan and implement sciencebased programs for kids of all ages. With a busy schedule of field trips beginning just as she got on board, Sonja immediately jumped into preparing lessons and helping to host students on Arboretum visits. She says "The youth education position at PHA combines my love for the outdoors with the art of uncovering children's innate desire to learn through exploration."

In addition to her position at PHA, she is International Baccalaureate Coordinator for the Martha's Vineyard Public Charter School, and last year she coordinated virtual learning for the school's kindergarten through fourth grade classes. Her experience working with students both online and in-person has been an asset during this transition time when some classroom visits are still being held over Zoom. Sonja is quick to learn and enthusiastic, and she has already helped make it possible to bring students back to the Arboretum for field trips this fall. We are thrilled to have her on the PHA team.



Sonja Josephson

Elliott Bennett Retires as Youth Educator

Elliott Bennett, who joined us in spring 2019, retired from her position as PHA Youth Educator this past summer. She brought many years of science and education experience to her role here, along with a genuine excitement about the natural world that she shared with children of all ages.

Although her time here coincided with major disruptions to the Island's educational system due to the pandemic, and field trips were put on hold, Elliott worked hard to bring the Arboretum to Island kids. She enthusiastically delivered as many virtual field trips as possible, and her love for plants and PHA was infections even through a screen! And she jumped into creating imaginative self-guided activities for kids and families, like the popular gnome hunt, a new version of the PHA quest, and a children's nature poetry contest.

Elliott will be missed as our Youth Educator, but we are happy that she'll continue her connection to the Arboretum by volunteering as a school guide during field trips.

Arboretum Wish List

Portuguese Translation for Youth Education Handouts

\$200

Our goal is to increase the accessibility of our nature-based educational programming for English language learners visiting the Arboretum and participating in our school programs. One way we can do this is by providing Portuguese translations of our worksheets and brochures. The requested gift amount would pay for the translation of one handout for each grade-level, K–5.

Flora of North America Volumes 1 and 2 \$200

Now that our herbarium houses specimens of almost every vascular plant known to have occurred on the Island, we are beginning to focus on documenting the non-vascular plants known as bryophytes—mosses, liverworts, and hornworts—which occur here. In order to aid in specimen identification, we would like to purchase the two volumes of the *Flora of North America* relating to bryophytes.

Ten Plant Press Kits

\$1,000

With the blossoming of our herbarium has come enthusiastic interest in both youth and adult education programming centered around the process of collecting and creating preserved specimens. To provide an authentic experience and enrich understanding of this aspect of plant science, we would like to have a set of these real "tools of the trade" available for use within our own programs and by local science teachers.

One Year Supply of Cigar Beetle Pheromone Traps \$1,700

A critical aspect of maintaining the plant specimens in our herbarium is to keep them pest-free through an integrated pest management (IPM) program. A full-blown insect infestation is a lengthy, expensive problem to solve that can result in severe damage to the collections. These pheromone traps help us monitor for the presence of pests and take mitigating action in time to prevent real trouble.

If you are interested in sponsoring any of these items with a donation to Polly Hill Arboretum, please contact us at info@pollyhillarboretum.org.

Thank you for your consideration!



Fourth grade students prepare to be "Tree Detectives" as they explore the Arboretum.

What's New in Youth Education?

This past summer the Arboretum was lively with children exploring the grounds on the self-guided butterfly hunt, listening to nature-based stories during our weekly book series, and writing Arboretum-inspired poetry that was exhibited in the Far Barn. And in the fall, it was wonderful to welcome students from every school on the Island back to the Arboretum.

Our educational offerings, which tie in with the State's science standards for each grade, include a lesson in the classroom that prepares students for what they will see



A kindergarten student investigates kousa dogwood fruits.

when they get to the Arboretum. This past season, teachers and PHA staff adapted these introductory lessons by holding them outdoors when possible, and by pre-preparing kits with natural materials for the students to examine during virtual presentations. And in contrast with last fall's all-virtual field trips, children were once again able to experience hands-on learning on our grounds. Being at the Arboretum in person gives students the opportunity to feel a fuzzy rhododendron leaf, squish a dogwood fruit, smell pine needles, or hear acorns dropping to the ground. This type of experiential learning is not only fun and especially important after the past year, it deepens the children's connection with nature and accommodates different learning styles.

Though most of our student visitors are in kindergarten through fifth grade, we are excited to be working with a class studying Island natural history from Martha's Vineyard Regional High School. The group, led by MVRHS teacher Anna Cotton, will visit the Arboretum throughout the year to learn from our staff about every aspect of public horticulture, from what happens in an herbarium to how we make compost. We look forward to expanding our offerings for middle and high school classes in the coming year.

In addition to our school programs, we continue to offer seasonally changing

self-guided activities for children and families. If you didn't catch our autumn leaves scavenger hunt, try out the winter tree ID brochure, and keep an eye out for the return of our popular gnome hunt. See you out on the grounds!



Oak Bluffs kindergarteners embrace a tulip tree after examining its unique seed pods.

Two Join PHA Board of Directors

The PHA is pleased to announce the nomination of two new board members: Donna Paulnock and John Kennedy.

Donna Paulnock is a scientist by training who also brings experience in public gardens leadership to her role on the PHA Board. We have known Donna for several years



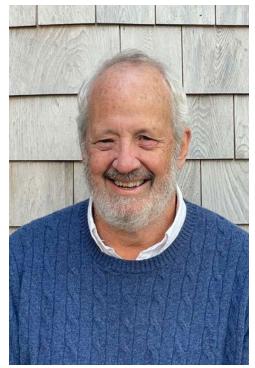
Donna Paulnock

through her volunteer work at the Arboretum, and her warm personality and genuine love of nature were evident from the get-go. She also volunteers on the Town of West Tisbury's Conservation Commission and sits on the Millbrook Watershed Committee along with PHA Executive Director Tim Boland.

Tim says, "I am excited about Donna joining our board. She enjoys the camaraderie of our volunteers, loves plants, and understands the value of plant sciences like botany and horticulture."

Donna and her husband John built a house on Martha's Vineyard in 1995 where they spent vacations until moving to the Island permanently in 2017. Donna spent 30 years of her career at the University of Wisconsin, Madison where she was a professor in the medical school and worked on aspects of immunology and infectious disease. Toward the end of her time there she was asked to serve as Dean for Biological Sciences, and subsequently took over as Director of the UW-Madison Arboretum, a post she held for six years. She says, "This position gave me not only joy but additional insights into nature and the environment."

John Kennedy comes to the Board with a long resume of work as a journalist, author, and professor. His professional accomplishments include the establishment of an award winning beat covering legal affairs and business trends for the *Boston Globe*, and the 2005 publication of his book, *A Course of Their Own: A History of African American Golfers*. He has held positions at La Salle University and Rosemont College, both in Pennsylvania, and currently teaches at Boston University.



John Kennedy

In Memoriam: Leslie Grey

This September, the Arboretum lost a dear friend and member of the Island community, Leslie Gray. Although her husband, Hunter Moorman, served on the PHA Board of Directors, Leslie was the one who first formed a connection here as a volunteer on the grounds crew.

Leslie had been a history teacher for over 30 years in Fairfax County, VA before she and Hunter moved permanently to West Tisbury in 1991. A lover of plants, people, and art, Leslie found multiple ways to get involved at the Arboretum. She was an avid gardener and enjoyed honing her skills and learning new things during Arboretum walks, tours, and weekly volunteering on the grounds. In a 2011 post on her gardening blog, she wrote about PHA and how it had become an important part of her life: "It is within walking distance through the woods, so I prefer walking there rather than on the local roads... In the summer, I volunteer on the grounds crew once a week. So when I take my walks now I can see the results of our pruning, or raking, or planting and have started to take a real sense of pride in the place."

Leslie was an accomplished painter, whose piece, "West Field with Flowering Ash," was featured in the Arboretum's 2018 exhibit, Art in the Arboretum. She often took part in nature-based art classes at PHA, where she enjoyed the camaraderie and the opportunity to draw and paint in a beautiful setting. It was a privilege to have her as a part of the Arboretum community, and her positive energy, curiosity, and kind spirit will be greatly missed. John lived and worked in California, Oregon, Idaho, Boston, Philadelphia, and a number of international locales before moving to Martha's Vineyard in 2011. Soon after they arrived on the Island, John and his wife, Jane Seagrave, became PHA members. He says that during the COVID-19 lockdown, spending time at Polly Hill Arboretum was a welcome respite. Both he and Jane were working from home so the ability to get out onto the beautiful Arboretum grounds not only provided much-needed exercise, but also a refreshing change of pace.

We are fortunate to be joined by Donna and John, whose skills and breadth of experience are sure to be assets to the PHA Board of Directors.

New Curator/Assistant Director Hired

We are thrilled to welcome (back) Emily Ellingson, who recently joined the PHA staff as Curator/Assistant Director. Emily returns after having worked as the PHA Curatorial Intern in 2013. She says, "Eight years ago, I was drawn to Polly Hill Arboretum because of its unique story, passionate staff, and amazing plants, and those same things attracted me to this position. In a lot of ways, interning at PHA is what inspired me to become a curator, and it's very special that I get to return in that role."

Emily Ellingson grew up in South Central Minnesota, where she received a BA in Biology with an Environmental Studies concentration from St. Olaf College in 2009. Her first job out of school involved doing botany surveys in the East Cascades in Washington state. Her interest in plants and public service led her to the Maine Conservation Corps, where she was first introduced to public gardens through her AmeriCorps host site, Coastal Maine Botanical Gardens in Boothbay, Maine. Her subsequent internships at the Arnold Arboretum in Boston, Massachusetts, the Filoli Center in Woodside, California, and at Polly Hill Arboretum cemented her interest in pursuing a career in public horticulture.

Emily moved back to Minnesota for an MS in applied plant science with a museum studies minor from the University of Minnesota. Her research focused on understanding the genetic diversity and conservation potential of Minnesota's most endangered tree, the eastern hemlock. For the last four years, she has been the Native Plants Curator and Collection Manager at The Arboretum, State Botanical Garden of Kentucky, where she managed the maintenance, development, and interpretation of a native plant collection and remnant woodland.

Emily arrived on Martha's Vineyard in late October, welcomed by a nor'easter that impacted a number of trees on the Arboretum



Emily Ellingson

grounds. Undeterred by the blustery welcome, she is settling into her new role well. Emily says she looks forward to working with her fellow staff on some of the topics she is most interested in—plant conservation and research, public education, and historic preservation. PHA Executive Director Tim Boland adds, "We are so pleased to have Emily join our staff. As the world gets more challenging for plants, we look forward to her leadership in collections advocacy and plant conservation."

PHA Board Retirements

PHA has relied on the strong stewardship of its Board of Directors since its inception as a public garden. Three long-term members who have made significant contributions to our governance, planning, and fiscal management, recently retired from the Board: Doug Sederholm, Susan Wasserman, and Pam Kohlberg. Their era was a transformative one for the Arboretum as it grew from a young public garden into a mature Island institution. Their contributions to Polly Hill Arboretum's growth and vitality were many.

Douglas Sederholm retired from PHA in the summer of 2020. His work on the Board reflects both his caring nature and his professional qualifications as an attorney on Martha's Vineyard. He devoted a great deal of time and lent his expertise on many occasions since joining PHA in 2011. "We could always rely on Doug for his balanced perspective and thoughtful decision-making," says PHA Executive Director Tim Boland. Early in his tenure, Doug took on the essential role of updating and improving the by-laws of our young nonprofit, thereby helping to shape a growing institution that has thrived under the leadership of Doug and others. His good works extend beyond our garden walls to the rest of the Island where he has served

for several years on the Martha's Vineyard Commission. Tim adds, "Doug has a very strong sense of community, and of the special character of the Vineyard. I am grateful for all his efforts to preserve the sense of place here at PHA and on the Island."

Susan Wasserman also joined the Arboretum's Board in 2011. She has filled many roles during her tenure including as Board Secretary, and worked with Doug Sederholm on the governance committee before becoming Board Co-Chair in 2019. Tim remembers, "I met Suzi during my time as the PHA Curator (2002) and watched her bring a sense of midwestern pragmatism to the many professional roles she held on the Island. In the truest sense she helped us grow, and her wise counsel was instrumental in our development into the public garden you see today." Suzi worked on the revision of several institutional policies that were in need of significant updates. We are so thankful for her dedication and hard work. Luckily for us, she continues to lend her efforts on the staff affordable housing committee, and also as a trusted advisor to the PHA team.

Pamela Kohlberg retired from her position on the PHA Board this year after serving since 2012. During her term, first as Co-Chair and then as Chair of the finance/investment committee, Pam assumed a leadership role in ensuring the preservation and growth of the Arboretum's endowment. At her initiative, the finance/investment committee undertook a multi-year endeavor to bring PHA's investment portfolio into alignment with our organization's commitment to environmental conservation. Now four years into this effort, PHA serves as a model for other nonprofits by advancing environmental protection through its investments, while achieving competitive returns. While concentrating on integrating environmental/social/governance (ESG) considerations, PHA's portfolio now includes companies playing an active role in addressing climate change and reducing greenhouse gas emissions. Tim notes, "Pam and her family have been environmental leaders on the Island for several years. Her dedication to matching our mission with impact-driven investment strategies has been inspirational." Pam's wellinformed, considerate approach to numerous issues has been instrumental in shaping us into the organization we are today.

We are grateful to all three of our outgoing Board members for their time spent helping the Arboretum to meet its mission. We wish them well in their future endeavors.

Herbarium Hosts First Intern

This summer we piloted a high school internship program in our herbarium (PHARB), and were lucky to have Martha's Vineyard Regional High School senior Ella Buchert work with us twice a week to help digitize our collection. Interested in both business and environmental studies, Ella serves on the board of the high school's Protect Your Environment Club. Her maturity, drive, and passion for environmentalism made her a perfect fit as our first herbarium intern.

Thanks to a grant we received from the Edey Foundation, we were able to purchase the specialized imaging equipment necessary to create accurate digital copies of our herbarium specimens. Once Ella was trained to use the lightbox, camera, and photo editing software, she worked independently to photograph vouchers one by one, systematically making her way through each cabinet of specimens. For a more holistic experience, her herbarium work was supplemented by time spent in the greenhouse and out on the Arboretum grounds.

By the end of the summer, Ella had digitized over 1,000 images (including the ones seen on this issue's back cover), which are now available for the public to view online through the Consortium of Northeast Herbaria portal at neherbaria.org. Asked about her experience, she says "My favorite part of the internship was the variety of things I got to do and learn. I was surprised by how much data is kept on these plants and how organized everything is!"

We hope that through this internship, students will become inspired by the diversity and relationships within the plant kingdom, and leave with a better understanding of potential careers and fields of study related to the plant sciences. Ella did an excellent job, and we wish her the best of luck as she applies to colleges!



Ella Buchert creates high-resolution images of pressed plant specimens with PHA's new digitizing equipment.

VOLUNTEER PROFILE



Susan Pheips

Susan Phelps

Stop by the Arboretum on a summer afternoon and you might be greeted by Susan Phelps behind the desk in the Visitor Center. Susan is a longtime, dedicated member of the Arboretum volunteers, and in addition to staffing the Visitor Center, often helps to welcome attendees during lectures in the Far Barn.

Susan and her late husband, Richard, began coming to the Island seasonally in the 1970s when they opened the Book Den East, a used book store in Oak Bluffs. Susan has lived year-round in West Tisbury since 1994, and she remembers that she was involved in PHA from its beginnings. She says, "I had the privilege of getting to know Polly and was enthusiastic about the Arboretum from the get-go." She was working for the Martha's Vineyard Public School system at the time, facilitating classroom/community involvement initiatives. Susan assisted PHA associates with one of the first projects to seek funding and garner support during the Arboretum's founding years—a joint student education initiative with the Arnold Arboretum, which has grown into the robust youth education program we offer today.

She later joined the Arboretum community as a volunteer, where she started by working in the Visitor Center, and eventually began helping out at programs (she wanted to attend most of them anyway!). She enjoys helping to build support for the Arboretum while also furthering her own horticultural education. An avid gardener who has always been drawn to the natural world, she appreciates meeting like-minded people through her work at PHA. Her love of gardening started young when at about eight years old she planted carrot and radish seeds in hard clay soil and was amazed when they turned into something she could eat. She highly values the many learning opportunities she's had with PHA staff and programs, as well as access to Island-appropriate plants through the plant sale, all of which have improved her ability to cultivate pleasing and sustainable gardens in her own landscape.

Her advice for anyone considering volunteering at PHA? "Do it! It's a wonderful group of people, all around." She describes a welcoming atmosphere, where feedback from Visitor Center volunteers, who spend a lot of time interacting with visitors, is encouraged.

We are glad to have Susan on our team, and grateful to all our dedicated volunteers, without whose help our visitor services, educational programs, and horticultural work would not be possible.

If you are interested in volunteering, email info@pollyhillarboretum.org for more information about our volunteer programs.

Butterfly Weed Flourishes at the Bamford Preserve

In July of this year, the Nature Conservancy (TNC) and volunteers planted over 1,000 butterfly weed (*Asclepias tuberosa*) plants grown by PHA at the TNC-owned Bamford Preserve in Edgartown. The planting was part of a long-term effort to restore the site's native sandplain grassland—an imperiled ecosystem.

The story of the preserve's history can be found here: nature.org/en-us/about-us/wherewe-work/united-states/massachusetts/storiesin-massachusetts/marthas-vineyard-conservation/

Project coordinator Mike Whittemore says, "This year we planted the last plot of native warm-season grasses harvested on-Island for this large-scale restoration project. The butterfly weed planting event marked the start of a new phase to begin planting native wildflowers in bulk at the property. We couldn't have done it without PHA's expertise and willingness to grow butterfly weed through their MV Wildtype program."

Through MV Wildtype, a native plant propagation program now in its 15th year, Arboretum staff, research associates, and



Mike Whittemore (4th from left) and volunteers gather to plant orange butterfly weed at the Bamford Preserve.

volunteers have propagated thousands of plants for conservation organizations and Island landowners.

"We're happy to be able to grow locallysourced butterfly weed," says PHA Executive Director, Tim Boland. "When I arrived on the Island in 2002, butterfly weed was considered a plant of special concern; its populations were dwindling due to heavy deer browse, habitat fragmentation, and land conversion to agriculture."

One compelling reason to reintroduce plants of the milkweed genus into our local ecosystem is its importance to monarch butterflies, whose population numbers are declining rapidly. Monarchs depend on the availability of these plants as food for their larvae. And while monarchs may be the



Butterfly weed is a larval host of the monarch butterfly as well as a food source for many native Island insects.



Butterfly weed seedlings growing in plug trays in the PHA plant production area

most well-known species to utilize milkweed, numerous other types of butterflies, as well as moths, bees, flies, and beetles, all use milkweed plants as a food source. The *Asclepias* planted at Bamford Preserve will play an important role in the health of its grassland ecosystem.

Tim Boland adds, "We are pleased to be partnering with TNC on this community-based project. It's an inspiring example of how collaboration between organizations can amplify the scope of conservation efforts on Martha's Vineyard."

THE POLLY HILL ARBORETUM

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FIND US ONLINE

pollyhillarboretum.org instagram.com/pollyhillarboretum facebook.com/pollyhillarboretum twitter.com/pollyhillarb youtube.com, search: polly hill arboretum

ADMINISTRATIVE OFFICES

The Homestead 809 State Road West Tisbury, MA 02575

VISITOR CENTER/ VISITOR ENTRANCE

FROM THE HERBARIUM

795 State Road West Tisbury, MA 02575 ACCESSIBILITY The Visitor Center is wheelchair accessible.

VISITOR CENTER HOURS Open 9:30 am–4 pm daily, mid-May through mid-October

ARBORETUM GROUNDS HOURS

Sunrise–sunset, year-round Please note: maintenance is often performed on Wednesdays. Check website before visiting for occasional grounds closures.

ADMISSION \$5

Free to members & children 12 and under

FREE PARKING

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

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THE POLLY HILL ARBORETUM

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NON-PROFIT ORG



Urtica dioica ssp. gracilis

name "gracilis," which is the latin word for "slender"; our native subspecies tends to have leaves which appear a bit narrower than the other, as can be seen in these specimen photos. Although they are known to cause skin rashes from contact with their stinging trichomes, they are also widely used in herbal medicine, where careful handling is key! Neither subspecies is common on the Vineyard, but if you're especially keen to avoid a chance encounter in the wild, stick to the sandplain: nettles prefer a moist understory or, occasionally, a damp meadow.

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Stinging Nettle

We have two subspecies of stinging nettle on the Island: the American stinging nettle (Urtica dioica ssp. gracilis), an MV native plant, and the exotic European stinging nettle (Urtica dioica ssp. dioica). Though it may not be obvious to the untrained observer. the most notable difference between the two is in the flower: our native nettle is monoecious, which means it has both male and female flowers coexisting on the same plant. On the other hand, European nettles exhibit either all male or all female flowers. Another clue can be taken from the subspecies