



PHA's historic Far Barn

## Polly Hill Arboretum Designated as Historic District

In June we received welcome news: the National Park Service has listed PHA as the Polly Hill Arboretum Historic District in the National Register of Historic Places. This formal recognition of the Arboretum's significance, based on national standards, honors the exceptional importance of our historic property as well as our preservation efforts.

The listing is the culmination of years of work undertaken with assistance from the West Tisbury Local Historic Commission (WTLHC). We are particularly proud for it honors Polly Hill's original vision for her property. "The landscape design of Barnard's Inn Farm was bequeathed to us by generations of farmer-owners," noted Polly in a 1998 interview. Her plans included

"trying not to spoil the character of the old farm and its inherited landscape." At PHA we continue to respect the historic buildings, stone walls, and open meadows that provide a template for our work.

While the Arboretum is known for its remarkable collection of woody plants, it is equally significant as a rare surviving agricultural landscape. PHA is one of the only historic farmsteads remaining on the Vineyard that is open to the public. In addition we are part of a larger area of conserved open space in West Tisbury, helping to preserve the town's rural character.

The National Register of Historic Places listing recognizes both the integrity of our landscape and the extraordinary efforts

of Polly Hill: "The Polly Hill Arboretum Historic District retains integrity, and its present appearance clearly conveys the property's evolution across 300 years of island history, from colonial farm to summer retreat to arboretum."

The complex process of applying for the National Register involved extensive research and collaboration with many people and organizations. Special recognition goes to PHA's Education, Membership & Outreach Coordinator Karin Stanley who was instrumental in this effort. We would also like to thank Jill Bouck, Dick Burt, Anne Fisher, Leslie Gray, and Ellen Weiss of the WTLHC, as well as many others too numerous to list here.

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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 enjoyment of all.

*Meristems* © The Newsletter of the Polly Hill Arboretum

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At the PHA nursery we grow plants for use in community outreach projects.

## Message from the Director

Now in our 17th year as a public garden on Martha's Vineyard, I look back at this past year and see PHA dynamically linked with the local community. In this issue we establish a new section that explores that link: Community Ecology. I'm well known to expound on the connection between plants and people. It's at the core of our mission! At PHA we strive not only to share our expertise, but also to positively influence our local ecology, and in doing so create opportunities for the public to value the role of plants in our lives. Through growing and studying plants and sharing our resources, we support the ecological health of our beautiful and fragile island. Plants, knowledge, and people power can transform communities.

In this issue we have several examples where our expertise, activities, and plants have moved beyond the stone walls of the Arboretum and into the Vineyard community. These include civic projects such as the West Tisbury Library landscape and native plant restoration at the Gay Head lighthouse. You will read about a collaboration with Island schools where Arboretum-grown plants help teach

local kids the value of wildlife gardening. As always, it's our school group fieldtrips that produce our most enthusiastic off-site ambassadors, our local Vineyard kids.

With the announcement of our recent listing on the National Register of Historic Places, we can say with great pride that in addition to operating a public garden, we are preserving a historic site for the community. In the year ahead we will fully realize a new Education Center and Botany Lab. This building, tightly entwined with our educational mission, will set the stage to positively influence our community ecology for years to come—more science, more classes, more students, greater outreach.

You are our community. Thank you for your support. Although a small portion of our campus will be closed for building construction the first half of this year, be sure to visit the grounds, attend our popular winter walks, and watch for our exciting spring plans.



# Mill Brook Watershed Management

PHA is centrally located within the 3,400-acre Mill Brook watershed. We are providing local expertise to the town of West Tisbury through participation in the Mill Brook watershed study. Executive Director Tim Boland was appointed to the Mill Brook watershed management planning committee and helped draft the request for proposals and develop the contract for services. The bid was secured by the ESS Group, an environmental consulting and engineering services company with offices in Massachusetts and

Rhode Island. ESS is implementing a comprehensive study of the watershed with the cooperation of seven local organizations and the assistance of private volunteers.

PHA has volunteered to track rainfall to assist the study using our weather station. In addition Horticulturist/Arborist Ian Jochems has been collecting water samples and sending them to a certified laboratory for water quality monitoring. Tim joined Kristen Fauteux, director of stewardship for the Sheriff's Meadow Foundation, in

a botanical assessment of the Roth Woodlands in Chilmark where they collected aquatic plants as part of a species composition documentation project. The Roth Woodlands contain a large impoundment (man-made pond) that lies at the headwaters of the Mill Brook watershed. The impoundment is part of a larger study by the Massachusetts Division of Ecological Restoration that is advising on the placement of a new culvert to improve water flow and fish habitat.

## MV Habitat Kids

MV Habitat Kids is a collaborative nature education program designed to increase environmental literacy in elementary school students on Martha's Vineyard. Children learn about native habitats on Martha's Vineyard, then put understanding into practice through the creation of a "habitat patch" at their school. As a result, kids get directly involved in hands-on conservation stewardship and motivated to protect our local environment.

This inventive conservation education program was devised by biologist Kendra Buresch through the support of the Martha's Vineyard Vision Fellowship. The project is a collaborative initiative with an advisory committee comprised of The Nature Conservancy (TNC), Polly Hill

Arboretum, Biodiversity Works, and Island Grown Schools.

Classroom lessons focus on the ecology of local habitats, habitat fragmentation, and the principles of ecological restoration. The next step is the creation of a school habitat patch to establish native plants, attract wildlife, and produce seed. Students share in designing and creating their school's habitat patch, which could include plants from PHA's MV Wildtype program (native plants grown from Island-collected seed), a water source for birds and other wildlife, cover boards for reptiles and amphibians, and additional features to modify schoolyard landscape into habitat for wildlife.

PHA supports MV Habitat Kids through assisting with site selection and design,



Kendra Buresch and the Chilmark School's habitat patch



Chilmark students at work

growing native plants, and assisting students with planting and collecting seeds. PHA Horticulturist/Arborist Ian Jochems was instrumental in helping students create the Chilmark School's habitat patch in 2014. Since then students have collected seed from their school's habitat patch and planted them at a sandplain grassland restoration site at Herring Creek Farm in Katama, aiding TNC's ongoing ecological restoration efforts.

By getting young students directly involved in local restoration efforts, Kendra Buresch and MV Habitat Kids hope to encourage a generation of children who understand and appreciate the Island's unique habitats. PHA is proud to assist their efforts.



## New Storytime Program a Success!

Our new family book series brings story time to the Arboretum. Nearly 100 children and adults participated Tuesday mornings throughout July and August as Island families, summer residents, and vacationing families—including many first-time visitors!—enjoyed nature-themed books such as *Miss Rumphius*, *The Lorax*, and *This*

*Old Tree* read aloud. After story time, PHA staff and volunteers led an educational activity to encourage the exploration of Island plants and animals. This successful and enjoyable family program will return next summer. If you have storybook recommendations, please contact Visitor Services/Resource Specialist Erin Hepfner.



These Island visitors discovered the PHA storytime program through the newspaper.



A young Vineyard resident participates in an activity about plants and pollinators led by PHA volunteer Kendra Buresch.

## Never Too Soon to Think Spring

Last year we introduced several new spring events. We had so much fun, we can hardly wait to do it again! It's already time to start looking forward to these special Arboretum events.

Join us as we celebrate the season's return with PHA's Spring Celebration. This family-oriented event will get you out of the house and among the flowers when you need it most. Our springtime festival will include a daffodil show and children's arts and crafts. Bulb expert Brent Heath, of Brent and Becky's Bulbs, will lead a workshop on creating a potted bulb garden. PHA's

Spring Celebration is tentatively planned for Saturday, April 16. Look for finalized details on our website in the new year.

It's not surprising that Arbor Day is our favorite holiday at PHA. On Friday, April 29, join PHA staff for a special afternoon devoted to trees. Our annual observance celebrates the role of trees in our lives and promotes tree planting and care. Inspired by Sir Peter Crane's talk on the ginkgo tree last summer, we have chosen a ginkgo for our tree planting demonstration.

Looking for a Mother's Day outing? Amidst flowering cherries and magnolias,

PHA provides the perfect place. In celebration of Mother's Day we will open the grounds on Sunday, May 8, to family picnics. Special spring blooming plants—the ideal present—will be for sale. In addition, PHA staff will be readily available to take family photos. As a complimentary gift to honor Mom, we'll print photos on location.

We officially kick off our summer season on May 28 with the opening of our Visitor Center and our annual Spring Plant Sale. Stay tuned for more details and the addition of new events.

## Renowned Botanist Sir Peter Crane Visits PHA

The Arboretum was honored to host Sir Peter Crane this past August. Dr. Crane presented a fascinating lecture on the natural and cultural history of the unique and ancient ginkgo tree (*Ginkgo biloba*). With the Far Barn filled to capacity, PHA board member Pamela Kohlberg introduced Dr. Crane, following a delightful dinner hosted at the Arboretum by Pam and husband, Curt Greer. Dr. Crane was joined on the trip by his wife, Elinor, as well as his eminent colleagues and frequent collaborators, Dr. Else Marie Fries, professor of paleobotany emeritus at the Swedish Museum of Natural History, and Dr. Kaj Raunsgaard Pedersen, associate professor emeritus at the Department of Geoscience, Aarhus University, Denmark. This trio of prominent paleobotanists had a chance to explore the Island together including a visit to the Martha's Vineyard Museum to examine their fossilized plant collections. We thank Pam and Curt for their assistance in making Dr. Crane's visit an immense success! In addition we thank Bartlett Tree Experts, co-sponsors of this lecture.

## Tory Stewart: Connecting with a Family Tree

Victoria (Tory) Stewart, our 2015 curatorial intern, can trace her heritage to the Stewarts for whom the genus *Stewartia* is named. She also has an admitted affection for another family, a plant family—the Theaceae—to which *stewartia* belongs (See page 8). It's only fitting that one of the projects she tackled at PHA involved her namesake genus.

For her *stewartia*-related project Tory used a monograph and identification key written by Stephen A. Spongberg (PHA's first director) and transformed it into a useful illustrated guide. Her revealing images of *stewartia* illuminate the technical language of botany resulting in an accessible and valuable resource.

A cornerstone of the curatorial internship is participation in the ongoing effort to curate all areas of PHA's living collection. This detailed process includes reviewing plant records, assessing every plant in the field, and developing a plan of action for improved health and aesthetic appeal. Tory surveyed five defined areas adjacent to the Homestead. In addition, she ably handled the challenging, sometimes confounding, task of meeting the

watering needs for hundreds of plants installed at the Arboretum over the last several years. In this rather dry growing season, Tory welcomed any forecast for rain!

In her application Tory expressed her hope that the internship would "bring together my two botanical passions: horticulture and curation." Her education and past experiences as an Arnold Arboretum intern and a curatorial/field assistant at the UC Davis Center for Plant Diversity have contributed to fueling her passions. Through witnessing her engagement in these interlaced aspects of her curatorial internship at PHA, we saw her goal realized.

As Tory departs she'll leave not only her remarkable contributions, but also common threads onto which next year's intern will attach their story. One thing we know for sure: Tory will forever have ties to PHA. We wish her the best as she furthers her career in the world of public horticulture.

## Summer Interns

Every year we welcome enthusiastic college students to PHA as part of our Feldman summer internship program. This year's interns, Jayne Boccella-Perras and Abby Makowski, arrived with characteristic enthusiasm and left with even more! Both women felt their internship experience surpassed their expectations.

Jayne and Abby enjoyed the diversity of tasks and the balance of work and education. Both gained a greater appreciation of public horticulture. Abby enjoyed her role in caring for a curated plant collection, something not available from her commercial nursery management program. For Jayne, this summer's fieldtrip to the Woody Plant Conference at the Scott Arboretum (near Philadelphia, her hometown) opened

her eyes to the increasing horticultural opportunities in the urban landscape. Another summer highlight was the chance to tree climb with PHA Horticulturist/Arborist Ian Jochems. Every year our interns spend a few days learning the ropes (literally and otherwise!) of how to make a simple and safe ascent up a tree.

All too soon it was over. Jayne returned to Temple University to finish her senior year, and Abby, to Michigan State University to begin her junior year. We wish them continued success. We wholeheartedly thank the Feldman family for their continuing support of the important and influential PHA summer internship program.



PHA curatorial intern Tory Stewart and summer interns Abby Makowski (middle) and Jayne Boccella-Perras (right) at Longwood Gardens



## Brian McGowan Gets Growing

In June we enthusiastically welcomed Brian McGowan to the Arboretum as our full-time plant propagator. With equal enthusiasm, Brian jumped into the season in full swing—summer interns on board, plant sale underway, and about a zillion seedlings in the greenhouse looking for elbow room. He took it in stride, employing skills honed over years of pursuing his genuine passion: plants. In his employment application Brian shared his tendency to express that passion through propagation. And he has certainly “expressed” himself. We’ve got the plants to prove it!

PHA Curator Tom Clark was acquainted with Brian and his wife, Alice, when they owned and ran the successful nursery Blue Meadow Farm in western Massachusetts. Tom knew him to be a talented propagator and an affable person. Tom recalls, “When

I saw his name on the application, I was aglow, and confident Brian would be a great fit at the Arboretum.”

Brian’s experiences with plants are as broad as his interests. Most recently he was the assistant director of horticulture at Wave Hill, an exquisite public garden in New York City. His work as a restoration designer for Cape-based Wilkinson Ecological Design, as well as his volunteer conservation work, attest to his dedication to ecologically sound practices. In addition, Brian’s formal education includes a master’s degree from the Conway School of Landscape Design in Conway, Massachusetts, and a bachelor’s degree in plant and soil science from UMass Amherst.

The Arboretum’s size, diverse collection, and emphasis on education and research appealed to Brian from the start. He has set-



Brian McGowan at work

tle comfortably into his Plant Propagator/Horticulturist position at PHA and into the culture of Martha’s Vineyard. We’re thrilled to have him on our team. Be sure to introduce yourself on your next visit.

## Arboretum Wish List

### Sony Cyber-shot Camera – \$898

The Arboretum seeks funding for an updated digital camera to capture evening lectures, daytime programs, landscape vistas, and botanical close-ups for sharing online and in our publications. We would like to purchase the Sony Cyber-shot DSC-RX-10 camera. Donations of partial funding are graciously accepted.

If you would like to contribute to the purchase of a new camera for PHA, please call Barbara Conroy or Tim Boland at 508-693-9426. We extend our gratitude to those of you who have responded to our previous requests.

## Jessica Dyson Named PHA Research Associate

At the summer board meeting Jessica Dyson, GIS manager for the Massachusetts office of The Nature Conservancy (TNC), was approved as a PHA research associate. Jessica has been working with Arboretum staff to develop geographic information system (GIS) maps that depict the distribution of native and non-native plants on Martha’s Vineyard.

Her principle work at TNC entails integrating geographic information into conservation science and planning, land protection, stewardship, and communications. She brings impressive educational credentials including an undergraduate degree from the School of Foreign Service at Georgetown University and a Master of Environmental Management from the Nicholas School of the Environment at Duke University.

Jessica has been assisting PHA with the flora of Martha’s Vineyard through the development of digital maps that are directly linked to our field-collected



Jessica Dyson

herbarium specimens. This GIS mapping system allows us to increase accuracy and expand access to information as well as track our seed collections both off and on Island. We anticipate additional projects including the development of visitor interpretation that will link Arboretum visitors to our collections through the power of GIS technologies. We look forward to working with Jessica and sharing our progress in the years ahead.

## Board News

We bid farewell and extend thanks to three PHA board members who have stepped down this year: Rachel Smith Alternative, Prentice Bowsher, and Iya Labunka.

Rachel Smith Alternative joined our board in 2009. The daughter of PHA founder Dr. David H. Smith, Rachel has worked to continue her father's legacy and help the Arboretum evolve in visibility and impact. A passionate advocate for PHA programs, she has made a tremendous difference in our organizational growth.

Prentice Bowsher, veteran grounds volunteer, has served on the PHA Board

since 2012. Recently he and his wife, Sally, have sold their Vineyard home to return full time to Washington, D.C. Prentice regrets parting, noting that it has been a rewarding experience working with PHA. His wise counsel and thoughtful contributions will be missed!

Iya Labunka has also served on the PHA Board since 2012. Through her active interest in the environment and devotion to trees, she has been a strong Arboretum supporter. Inspired by the beauty of our landscape and our dynamic programming, Iya brought a powerful positive presence.

## Staff News

In June Executive Director Tim Boland presented at the New England Botanical Club's 120th meeting held at Smith College in Northampton, Massachusetts. His talk featured the ConServator, PHA's digital mapping program. In addition Tim presented a poster on our new Education Center and Botany Lab. A write-up will appear in an upcoming issue of their journal, *Rhodora*.

This summer Horticulturist Ian Jochems took the interns to the Woody Plant Conference at the Scott Arboretum of Swarthmore College in Swarthmore, Pennsylvania. They spent another two days touring public gardens, including Longwood Gardens, Chanticleer, and Wave Hill.

In September, Ian and Horticulturist Ben Madeiras attended "Selected Topics for Tree Care Professionals" put on by UMass Extension. Extension staff presented research on invasive insect pests and their management and weed management as it relates to the control of invasives.

Also in September Visitor Services/Resource Specialist Erin Hepfner attended the American Public Gardens Association's biennial Volunteer Engagement Symposium in Santa Barbara, California. This year's conference brought together 70 volunteer coordinators from public gardens across the country.

In October Curator Tom Clark traveled to Georgia and North Carolina to collect seed of native azaleas funded by a grant from the American Rhododendron Society. Tom also met with PhD candidate

Heather Gladfelter at the University of Georgia with whom PHA is collaborating to establish protocols for tissue culture of *stewartias*.

Tim Boland travelled in October to the Morton Arboretum in Lisle, Illinois, to attend the triennial International Oak Society conference. In November he travelled to Georgia in pursuit of endangered native oaks as part of a collection group involving six botanical gardens and arboreta. The group included Morton Arboretum curator Matt Lobdell, PHA research associate and former intern.



John and Corinne Kenney

## John and Corinne Kenney

When volunteers John and Corinne Kenney arrive to give a tour at PHA, we smile. You can see they are in this together. They arrive early, yet don't enter the Visitor Center immediately. They point at plants, converse with one another, and observe changes from their last visit. Once ready to guide, it's only a matter of time before they engage their group in cheerful, even humorous, conversation. Soon everyone is smiling.

Why do they guide tours together? They each agree, with a chuckle, it's because of their competitive nature. They are quick to add though that recalling botanical names is easier with two people. Tours are never repetitive with John and Corinne. They guide each one based on visitors' interests. The Kenneys love to make personal connections based on places and plants. When you are around John and Corinne—married 55 years—you get a sense of their love for life and for each other. You leave feeling better than when you arrived.

The Kenney's began their association with PHA early on. They have stories to share. Corinne, an accomplished artist, was painting *Clematis* 'Starfish' on an easel when Polly drove by in her golf cart asking if she could do anything for her. Corinne replied, "Let me paint your portrait," but Polly would have nothing of it. John remembers getting told, "Get busy, young man!" after lamenting to Polly about mice damaging their tree nursery. Their shared memories of Polly bring authenticity to their tours.

They both began their association with plants even earlier. John grew up on a farm in Kentucky. They both studied poisonous plants as veterinary students at Cornell University where they met. They have always had gardens, even a tree nursery, and they share a passion for plants. We appreciate that they take time to share their passion with us.

Corinne and John support PHA in many ways. They attend our talks and lectures. They encourage frequent visits to witness the seasonal progression. They enjoy volunteering. We invite you to join in the fun. For more information about volunteering at PHA, contact Erin Hepfner at 508-693-9426.



# *Schimlinia*: New Hybrid, Instant Favorite

by Tory Stewart

When asked to list my favorite trees, I gravitate towards quirky plants. Whether it has an interesting history, is unknown outside its native habitat, or just looks unusual, these types of plants make it to the top of my long, and ever-changing, list. Many plants fit the bill here at the Polly Hill Arboretum, but one that stands out for me is the Franklin tree (*Franklinia alatamaha*).

Discovered in the wilds of Georgia along the Altamaha River by John and William Bartram in 1765, the plant was introduced into cultivation by the 1770s. The tree's popularity resulted in widespread cultivation and propagation throughout the United States and Great Britain. By the early nineteenth century, though, the wild populations seen by the Bartrams were all but gone. And in 1803 Scottish naturalist John Lyon recorded seeing only six or eight trees by the Altamaha River. Later attempts to find these few trees were unsuccessful. *Franklinia alatamaha* was declared extinct in the wild.

Fortunately, the wide-scale distribution efforts upon the tree's discovery means that franklinia can still be seen in arboreta and botanic gardens around the world and grown in our gardens. Despite being native to Georgia, the tree thrives in USDA Zones 5 to 8 and does quite well here on Martha's Vineyard. Our largest specimen can be found in the West Field. Come August the tree will be bursting with white, camellia-like flowers with showy yellow stamens, which continue well into the fall. Fall is when franklinia really shines. The brilliant red, burgundy, and orange foliage sets off the bright white flowers—a truly remarkable sight.



Despite their differences, it's clear that these two (franklinia, on left and schima, on right) are close relatives.



A late bloomer, franklinia pairs beautiful white flowers with brilliant fall foliage.

While franklinia may be familiar to many gardeners, its close relative schima (*Schima argentea*) is more mysterious. In fact, this unusual tree was unknown to me until a fellow intern pointed it out on an Arboretum walk. I was struck by the fragrance and its delicate white flowers. And ... another tree in the Theaceae! Theaceae (the tea family), a particular passion of



mine, also includes stewartia and camellia. Yes, schima has all the qualities to make my list—quirky, obscure, and interesting.

An evergreen tree, schima is a common plant in Asia where its native range extends from Nepal to Taiwan. Relatively tall, some individuals reach over 60 feet. Its smallish, fragrant white flowers are typically found alone or in groups at the end of the branches. In its native range where the wood is widely used in construction, schima holds ethnobotanical significance. In Nepal the leaves and roots are used medicinally to treat fever, and its bark for intestinal issues (and also as a fish poison). You can see our very own schima near the eastern entrance of Polly's Play Pen, where it flowers in late July and August.

Horticulturists are compelled to create hybrids between different species of the same genus, hoping for something new,



better, different. Polly Hill called this pushing pollen. And when two genera, like *Franklinia* and *Schima*, are very closely related, you can be sure some enterprising plantperson will attempt an intergeneric cross with the hopes of combining their best characteristics. *Schima* offers genetic diversity, adaptability, and disease resistance. *Franklinia* brings cold hardiness and desirable ornamental traits. Hybridization is also a way to preserve franklinia's genetic material, especially important since it's extinct in the wild. Enter Dr. Tom Ranney of Mountain Horticultural Crops Research Station in Fletcher, North Carolina. Attempts at hybridization were successful: ×*Schimlinia floribunda* was born.

The new plant (We'll call it schimlinia.) exhibits characteristics from each parent. For example, schima has multiple flowers on a stalk; a trait also seen in schimlinia. In terms of leaf shape, schimlinia more closely resembles franklinia. Flower size is one area where the trait settled between the parent plants. Schima flowers are often small (about 1 inch), whereas franklinia flowers tend to be double in size (to 2½ inches). The schimlinia flowers favor the flower size seen in franklinia, ranging from 1½ to 2¾ inches. When it comes to number of flowers, however, the new hybrid goes above and beyond! The new hybrid schimlinia plants have anywhere from 10 to 90 flowers per



Multiple schima flowers nestle among its evergreen leaves

flowering shoot, whereas either parent tree has less than 20 flowers. The appropriately chosen species name *floribunda* comes from the Latin term for many flowers.

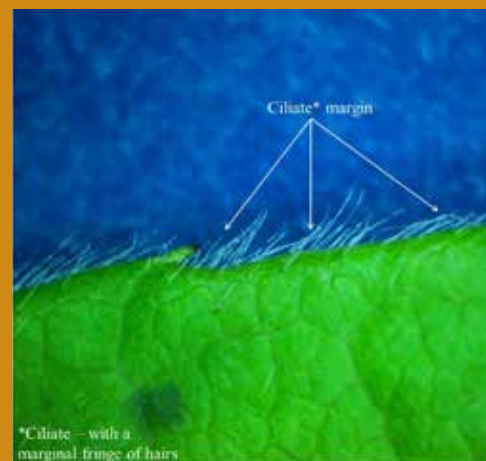
Schimlinia—rare, unusual, obscure—is still in trials and not available in nurseries, but it looks to be an exciting potential

addition to PHA's plant collection in the future, and to my list of favorite plants! In the meantime its intriguing and beautiful parents, franklinia and schima, are available at select nurseries and can be enjoyed in all seasons.

## Focusing on Stewartia

PHA holds a national collection of stewartia as part of a continent-wide program administered by the Plant Collections Network (PCN). Polly Hill's success in cultivating a wide variety of stewartia forms the basis of our diverse collection. As our collection grows, so does our interest in learning more about these remarkable trees and sharing our knowledge. To that end, curatorial intern Tory Stewart has created a comprehensive

*Stewartia* resource for us. She meticulously gathered pictures of the species and cultivars including photographs of minute details of stewartia morphology. A key, detailed descriptions, and cultural information are coupled with these images allowing even those daunted by technical jargon to feel at ease. Tory used a digital microscope purchased through a generous grant from the Vineyard Golf Foundation to capture the close-up images.



So *that's* what a ciliate margin looks like! Our new web-based stewartia resource will reveal all.

# Beach Rose: A Thorny Subject

by Tom Clark

The quintessential beach rose (*Rosa rugosa*) is not native—not to Martha’s Vineyard, not to New England, not even to North America for that matter. It actually hails from coastal areas of northeastern Asia. This summer beauty has been naturalized here on the Island for so long (and throughout coastal eastern North America) that its nativity is assumed and its presence widely accepted as a characteristic component of the landscape. Beach rose may not be native, however, it is part of our flora. For many it’s a symbol of summer.

*flora* (noun) – a list of plants growing, reproducing, and functioning outside of cultivation as part of the native ecosystem of that area

The flora of Martha’s Vineyard contains more than 1,200 different types of plants. Using the definition above, it includes nearly 400 non-natives. These botanical wash-ashores—one third of our entire flora—range from ostensibly innocuous

weeds to aggressive invaders such as oriental bittersweet and Japanese knotweed. These latter two (and sadly many more) spread with menacing speed, and their appearance portends ecological havoc. The greater number of these introduced plants, however, fall somewhere in between. The subject of this article is one such plant.

*Rosa rugosa* first made its way to North America as an ornamental in the mid-1800s. Embraced by gardeners, it proved a valuable addition to the palette of shrubs available for cultivated landscapes, especially in challenging coastal environments. A dense, compact shrub, beach rose is endowed with remarkable durability as well as good looks. Its large, fragrant, purplish-pink flowers later form orange-red fruits (hips) that are as attractive as they are tasty (that is if transformed into rosehip jelly!). So besides the requisite thorns, what’s the controversy?

Beach rose is not content to stay in the garden. Once a young plant is established (presumably by seed) its primary means of spread is through prolific suckering.



The white form is not rare and produces the same red hips.

It revels in romping through one of our most sensitive ecosystems—our coastal dunes. More than mere piles of sand, dunes are unique dynamic entities vital to the health of coastal ecosystems around the world. The ability of healthy dunes to mitigate powerful storm surges is proven.

Some would argue we should welcome any plant adapted to the harsh growing conditions of the dunes; beach rose eminently fills this role, and furthermore, it’s lovely. At first look, beach rose plays the same soil-stabilizing role as our native dune plants, but there’s an important difference: beach rose forms colonies so dense they overwhelm all native vegetation, suppressing it to the point of complete exclusion. That’s why you see it everywhere!

In the vegetated, undulating dunes of the Vineyard, great domed islands of beach rose float amidst a sea of beach grass, seaside goldenrod, and other natives. In the more sheltered back dunes they easily top three feet. Oceanside, their height progressively diminishes as they yield to the onslaught of wind, salt spray, and accumulating sand. At the absolute limit of dune vegetation, on the face of the foredunes, they are little more than ankle high. One of the most convenient places to see impressive colonies of saltspray rose, as it is also known, is along the barrier beach between Sengekontacket and the ocean. This attractive interloper can



The adaptability and showy flowers of beach rose make it a garden favorite.

Photo: William Cullina



be encountered in a rosy ring around the Island in similar habitats.

Seven other species of rose are recorded in the Island's flora. Three, like beach rose, are not native. Multiflora rose, in particular, is a nasty invasive that shows up on the Commonwealth's prohibited plant list. Of the four native species, two are most likely to be found in swampy or wet ground, the other two in open, drier sites. Beach rose is not easily confused with any of its kin. Its stems are thornier, the flowers larger and more vividly colored, and the hips significantly larger than those of any other rose encountered growing naturally on Martha's Vineyard.

Although admired by many for their beauty, the increasing presence of beach rose in our dunes raises concern: What is the long-term impact on the stability and ecological vitality of the dunes? Our dunes are important and sensitive ecosystems. Beach rose, as pretty as it is, has bullied its way in, and appears to be here to stay. Let's hope its presence doesn't lead to an unravelling of this iconic and vital ecosystem.



Loaded with vitamin C, beach rose hips are as healthy as they are eye-catching.



Bossy beach rose gains a foothold among beach grass and lichen.



## THE POLLY HILL ARBORETUM

### MAILING ADDRESS

PO Box 561  
West Tisbury, MA 02575

508-693-9426 Tel  
508-693-5772 Fax  
[www.pollyhillarboretum.org](http://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](http://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.



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## THEN & NOW



2009



1941

Enclosed by stone walls, our open fields were once part of a 19th-century sheep farm. Still here after so many years, these fields contributed to PHA's successful nomination to the National Register of Historic Places. The listing states, "The overall landscape has strong integrity as an agricultural farmstead, with minimal changes to the spatial arrangement of the fields and woodlands despite the changes in land use." In 1958 when Polly Hill imagined growing an arboretum, she considered the rural landscape

integral to her planning. She wrote, "I kept reminding myself that I was dealing with an old sheep farm and I should only make plans compatible with our quiet country setting of shingled buildings and granite walls." These pictures show State Road on the right with the renovated Cowbarn (Polly Hill's summer residence) located roughly in the center. There are more trees now, and a new nursery, but the fields and general character remain as evidence of our agrarian history.