Thank you to our friends and supporters!

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FROM THE BOARD CHAIR

DEAR FRIENDS,

I want to thank you for your support and provide some exciting updates. The past few years have seen positive changes that have resulted in some intriguing opportunities for the Friends of the National Arboretum. We are entering an exciting, transformational time!

The U.S. National Arboretum was established in 1927 by an act of Congress (with the help of David Fairchild [the namesake of our giving society] and many determined Garden Club women) at a time when agricultural science was critical to the support of our population and expansion of our nation. Since then, the Arboretum has played an important role in horticultural science, notably releasing 678 plant introductions, including many hydrangeas, camellias, and crapemyrtles. The Arboretum first opened to the public in the 1950s when people were eager to experience the riot of spring color provided by its first important collection—the Aralea Collection. Now, more than 600,000 people visit each year to enjoy our 446 acres of gardens, green space, and undamed areas. They come to unwind in this beautiful oasis along the Anacostia River in our hectar Capital city. They come from near and far to explore, learn, and connect with plants and nature. FONA educates more than 6,000 students each year in our Washington Youth Garden, many of whom are from underserved neighborhoods. Last sum-

Demand has soared for the Arboretum as a public garden and all that entails as well as for our award-winning youth education program. IN JUST 7 YEARS, WE WILL CELEBRATE THE U.S. NATIONAL ARBORETUM’S 100TH ANNIVERSARY The Arboretum and FONA have collaborated to define an exciting vision to make transformational changes leading up to the 100th anniversary. We at FONA are determined to help the Arboretum take its place among the leading scientific, historic, and cultural entities in this nation. Our desire is to help the Arboretum reach its potential and maximize its impact and value across a full spectrum of offerings:

- To connect people to plants and nature and promote their well-being,
- To foster horticultural science and become a critical convener within the field of science,
- To educate the next generation by showcasing the importance of agriculture in nutrition,
- To promote environmental conservation and enjoyment of this important public garden, and
- To preserve and interpret historic and culturally important elements of the Arboretum.

EXCITED TO HAVE YOU ON BOARD!
The Arboretum has a Strategic Plan and a master land use plan in place that provides a roadmap for FONA and the Arboretum. This roadmap includes plans for improvements to the Columns, Meadow, Flowering Tree Walk, National Herb Garden, Washington Youth Garden, and more. The U.S. Department of Agriculture (which administers the Arboretum) and Congress have demonstrated support by increasing the Arboretum’s budget for the first time in more than 10 years and authorizing new hires to augment Arboretum staff. The city of Washington, DC, is recognizing the importance of the Arboretum in the redevelopment of the Anacostia waterfront with the proposed Anacostia Bridge, a plan for the bike path to connect through the Arboretum, and the possibility of repositioning the M Street gate to accommodate neighborhood pedestrian and bike access. The demand for the programs of the Washington Youth Garden has never been stronger.

As I mentioned above, there has been tremendous forward movement at FONA in the past year. FONA’s Board members are embracing their role in helping to realize the vision of the Arboretum. Support for FONAS David Fairchild Society, our highest level of membership, by friends like you continues to grow, and our community of friends and network of partners have never been more energized. We have developed new revenue sources, including event space rentals at the Arboretum, for which demand is growing, especially for weddings!

THE STARS ARE ALIGNED...THE TIME IS NOW TO EMBRACE THE FUTURE OF THE ARBORETUM The Arboretum has a Strategic Plan and a master land use plan in place that provides a roadmap for FONA and the Arboretum. This roadmap includes plans for improvements to the Columns, Meadow, Flowering Tree Walk, National Herb Garden, Washington Youth Garden, and more. The U.S. Department of Agriculture (which administers the Arboretum) and Congress have demonstrated support by increasing the Arboretum’s budget for the first time in more than 10 years and authorizing new hires to augment Arboretum staff. The city of Washington, DC, is recognizing the importance of the Arboretum in the redevelopment of the Anacostia waterfront with the proposed Anacostia Bridge, a plan for the bike path to connect through the Arboretum, and the possibility of repositioning the M Street gate to accommodate neighborhood pedestrian and bike access. The demand for the programs of the Washington Youth Garden has never been stronger.

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THE FUTURE IS BRIGHT AND WE ARE EXCITED TO HAVE YOU ON BOARD! Even more exciting, FONA is currently undergoing a feasibility study to evaluate the potential for a capital campaign to enable us to realize this vision. I look forward to keeping you updated on our progress as we know more in the new year. It is only through your generous support that we can build FONAs capacity to make the Arboretum’s bright future a reality.

Thank you!

With warm wishes,

Jennifer Hatcher
Board Chair
Friends of the National Arboretum

FROM THE BOARD CHAIR
LETTER FROM THE DIRECTOR

Fraser Who?

IN THE OLESEN HOUSEHOLD.
Christmas isn’t Christmas without a Fraser fir (Abies fraseri). We crammed an eight-footer into the house this year, and while both my wife and I enjoy the quintessential fragrance that reminds us of Christmases past in North Carolina, I alone ponder the name. Fraser fir commemorates John Fraser, a widely traveled Scottish botanist and horticulturist who collected in the Southern Appalachians in the late 1700s. He discovered a number of other notable species there, including Magnolia fraseri, a large-foliaged, deciduous magnolia that adds an air of tropical primitiveness to an otherwise montane habitat.

The National Arboretum’s Magnolia Collection represents one of the most comprehensive and historic collections of cultivated magnolias in the United States. It was one of the earliest research collections, with our first botanists and breeders working toward characterizing existing taxa or creating novel ones. Today, we have more than 320 accessions of 41 species, 151 unique taxa, 14 USNA hybrid introductions, and 1 Flora of North America treatment. Because of its high-elevation habitat, M. fraseri doesn’t perform well here. However, a number of its large-leaved brethren do, including the highly ornamental but unfortunately near-threatened Ashe’s magnolia (Magnolia macrophylla var. ashei).

As part of our active plant genetic resource collection and conservation program, our scientists targeted Ashe’s magnolia as a charismatic and ornamental species that was in need of conservation. Importantly, we have identified new subpopulations that are in need of conserving and the best way to do that. We recognize that we as an institute cannot conserve all plants. The high-elevation Appalachian endemics like Fraser’s fir and magnolia are best left to our peer institutes in more hospitable climates. Thus, the National Arboretum has a long history of funding national collections across the United States through our financial and scientific support of the American Public Garden Association’s Plant Collections Network. We ourselves have two national collections: the Boxwood Collection, and as of this year, the Maple Collection. Up next, national status for our Magnolia Collection.

As we close out 2019, we look forward to 2020 and fruitful collections and collaborations as we seek to collect, conserve, and distribute plants for American landscapes, much like John Fraser did 100 years ago. All the best, Richard T. Olsen, PhD Director The United States National Arboretum

PLANTS THAT KEEP ON GIVING

Visitors to the U.S. National Arboretum likely have favorite plants they return to see season after season, year after year. We asked Arboretum staff members to name just one of their favorite plants. Here’s a glimpse of the plants that made it to the top of their lists. We hope you will be inspired to seek out these wonders on your next visit.

“Spiraea thunbergii ‘Ogon’”

“What’s your favorite plant?” I’d like to believe that question resounds in a gardener’s ears much like the way it sounds to a mother when asked to pick her favorite child. Nonetheless, some of my coworkers would probably guess that I’d gravitate toward something utilitarian, something with backbone, and something with many seasons of interest. They would be right. While many of the plants that fit into this category are scoffed at for being overused, they’re often planted because they’re easy to propagate and grow, because they serve as foundations for planting design, or because they provide year-round interest.

“I have never been known to be overly fond of plants that need coddling to stay alive, just so I can see them flower for a day before retreating underground until the following year. And my appreciation for fall color, maybe because the DC region isn’t known for it, has perhaps been one of my most driving influences in plant selection.

It may surprise you that a conifer or maple didn’t rise to the top of my list, but Spiraea thunbergii ‘Ogon’ is a wonderful companion shrub that can take some tough love and keep on giving year in and year out. Clusters of white flowers adorn its arching branches in early spring, followed by an emergence of spectacular chartreuse foliage with a willowy texture. In autumn, the fall color, maybe because the DC region isn’t known for it, has perhaps been one of my most driving influences in plant selection.

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“When most other deciduous trees and shrubs have already lost their leaves, this display is at full tilt. Who wouldn’t want some extra color in their Thanksgiving centerpiece?”

JOE MENY is the horticulturist in the Maple and Gotelli Conifer Collections. He has worked in Plant Records and a variety of gardens at the Arboretum since 2007.
Passiflora incarnata
Purple Passionflower or Maypop

When I was an undergraduate at Stephen F. Austin State University (Nacogdoches, Texas), I first encountered *Passiflora incarnata* in the wild during a field course. I had never seen a flower so complex and so beautiful before—it was love at first sight! From the delicate tendrils to the intricate corona, I was captivated by every aspect of this native plant which can be found from Texas to Pennsylvania. Little did I know or expect that just a few years later I would be researching this genus for my dissertation.

Among the many things to love about *P. incarnata* is its variation in flower color, ranging from nearly pure white to deep purple. Large fruits (berries, botanically speaking) are produced in the summer and are prized by many admirers for their sweet flavor. It is also a surpris-ingly hardy species that can survive the cold winters of the Midwest and Northeast—a rare trait in a mainly tropical species. Its inherent characteristics, *P. incarnata* is host to the larvae of the Gulf fritillary butterfly, *Agraulis vanillae*, which is an Oak Ridge Institute for Science and Education (ORISE) postdoctoral fellow who has served as the Curator of the Research Field on Valley Road. It is the largest of the high-impact breeding work is growing near the edge of the parking lot. However, the actual tree that was used for our claim this very plant somewhere in their ancestry. You will recognize this “handsome tree” (as Creech described it) as you enter the National Bonsai & Penjing Museum, just before the stone lantern on the right, close to the path. It’s an uplifting spot of color against the leaf litter away. It’s a slow-spreading plant that doesn’t like to have its roots disturbed, so once you find the perfect spot of dappled shade to plant it in, let it be. When visiting the Arboretum, look for it in the wooded Cryptomeria Walk as you enter the National Bonsai & Penjing Museum, it’s a very charming little plant. As a spring ephemeral, it has a short bloom time, usually starting in April and lasting just a couple of weeks before the petals start to fall away. It’s a slow-spreading plant that doesn’t like to have its roots disturbed, so once you find the perfect spot of dappled shade to plant it in, let it be. When visiting the Arboretum, look for it in the wooded Cryptomeria Walk as you enter the National Bonsai & Penjing Museum, just before the stone lantern on the right, close to the path. It’s an uplifting spot of color against the leaf litter early in the season.

Lagerstroemia fauriei
Japanese Crapemyrtle

Like so many other contributors to this series, I am what I call a “sentimental horticulturist.” I tend to like a plant as much for its story as for its horticultural attributes. It will therefore come as no surprise that one of my favorite plants at the National Arboretum is the large *Lagerstroemia fauriei* growing in the Research Nursery near Valley Road. This plant (accession NA 10536) is derived from seed collected by John Creech (former plant collector and Arboretum Director) in a mountain forest in Yakushima, Japan, in 1956. The seeds Creech brought back from this trip were distributed to botanic gardens and nurseries across the United States, including the National Arboretum.

My predecessor, Don Egolf, quickly discovered that this species was resistant to powdery mildew, a serious fungal disease that affects crapemyrtles in the United States. Beginning in 1965, he used this very clone in hundreds of crosses to develop the mildew-resistant hybrid crapemyrtles that are now ubiquitous in landscapes across the Southeast. Most of the National Arboretum’s crapemyrtle introductions, as well as many from other programs, can claim this very plant somewhere in their ancestry. You will recognize this “handsome tree” (as Creech described the species) growing around the outside border of the Herb Garden, in the Bonsai Museum, and in the R Street parking lot. However, the actual tree that was used for our high-impact breeding work is growing near the edge of the Research Field on Valley Road. It is the largest of the three *L. fauriei* trees planted there— you can’t miss it!

Jeffersonia dubia
Asian Twinleaf

I love spring ephemerals, because they are some of the first plants to pop up and add color to the garden, and they have an irresistible daintiness. Many plants in this group have pale flowers, but a purple one (my favorite color) caught my eye when I started working in the Bonsai Museum. The graceful little Asian twinleaf, *Jeffersonia dubia* (referred to as *Plagiorhegma dubium* in some sources) is related to, and somewhat resembles, our native *J. diphylla*. Unlike the white-flowered native, Asian twinleaf has saucer-shaped flowers that are a unique shade of lavender blue. The roundish, dark green leaves are tinged with red around the margins and deeply lobed at the top. Flowers and leaves both have thin, delicate stems, and the whole plant grows 9 to 12 inches tall; overall, it’s a very charming little plant. As a spring ephemeral, it has a short bloom time, usually starting in April and lasting just a couple of weeks before the petals start to fall away. It’s a slow-spreading plant that doesn’t like to have its roots disturbed, so once you find the perfect spot of dappled shade to plant it in, let it be. When visiting the Arboretum, look for it in the wooded Cryptomeria Walk as you enter the National Bonsai & Penjing Museum, just before the stone lantern on the right, close to the path. It’s an uplifting spot of color against the leaf litter early in the season.

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Chinese Swamp Cypress

I’m drawn to plants that are unusual, and Chinese swamp cypress is one of my favorites because of its unusual characteristics. I love its growth habit—it has a strong, straight trunk and branches that bear soft, wispy clouds of foliage. It can’t really decide if it’s deciduous or evergreen; it turns bronzy brown in late autumn and loses most, but not all, of its foliage when winter arrives. The spongy bark is thick and resembles the bark of fire-adapted trees, an anomaly for a species that inhabits swamps and can even grow in 2 feet of standing water. You can see a grove of these across from the greenhouses along Hickey Lane, in the triangle opposite the Goretli pond, and along the Anacostia River in the Asian Collections. Chinese swamp cypress is critically endangered in its native habitat, where it has been prized for its rot- and termite-resistant wood. It is sometimes planted on the edge of rice paddies. Critically endangered in the wild, it was once found throughout southeast China and Northern Indochina. The only wild populations now consist of a few hundred trees in Laos and Vietnam, where it can grow to more than 100 feet tall. These trees reach 30 feet in our conditions and are listed as hardy to Zone 8, but ours have withstood temperatures as cold as –10°F with no injury.

Gymnostrobos pensilis
Chinese Swamp Cypress

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Brenton had me go out to the store in this recent. He stopped me in the hallway and said, “Allie, I recently taught a Rainbow Foods lesson, of the kindergarteners with whom we had clamoring to get their hands dirty and cucumbers and ripped kale. Our students seeded cracker, which they topped with farro—and black-eyed pea hummus on a salad—full of spinach, celery, beets, kale started trying the foods we pre-turned up their noses at tomatoes and in both schools, students who initially are some of the most open and brave things I heard when I began my gardening and nutrition endeavors at KIPP Webb campus and Center City Public Charter School’s Trinidad campus last year. I was with skepticism, concern, distrust—who is this outsider trying to get us to eat Hakurei turnips and touch compost? My role as one of the four FoodCorps service members with the Washington Youth Garden was to teach hands-on, food-based lessons, promote healthy school meals, and support a schoolwide culture of health. I co-taught these lessons, planned community events, and ran taste tests with my partner FoodCorps service member to deliver WYG’s Garden Science program at two partner charter schools right near the Arboretum. As we gained familiarity and experience in both schools, students who initially turned up their noses at tomatoes and kale started trying the foods we prepared together. Foods like a plant part salad—full of spinach, celery, beets, farro—and black-eyed pea hummus on a seeded cracker, which they topped with cucumbers and ripped kale. Our students were some of the most open and brave titers of new foods by the end of the year, clamoring to get their hands dirty and experience the process of growing food. One teacher, who was also a parent of one of the kindergarteners with whom we had recently taught a Rainbow Foods lesson, stopped me in the hallway and said, “Allie, Brenton had me go out to the store in this cold to get bell peppers, I don’t even like bell peppers!”}

Now, as I’ve stepped into the role of Off-Site Program Manager for the Friends of the National Arboretum, I continue to see our Garden Science efforts come to fruition. This year students at our five active partner schools are already saying: “Are we gonna get to eat vegetables next week?” “Our school garden is the best because it helps people stay healthy,” and “We would recommend that every school have a garden to feed their community.”

Allie Arnold is the Off-Site Program Manager for FONA, after being a FoodCorps service member for the 2018-19 school year. She came to us with multidiplinary experience in food systems work, centered in Charlottesville and at the University of Virginia.

**Winter Garden Tips**

**SUCCESSFULLY PLACING PLANTS** is not just about aesthetics and the art of design, it also should consider soil compatibility and the science of horticulture. Improving soil health will maximize plant productivity. Healthy soil supports plants in times of stress during drought or excessive moisture. Healthy soil contains both inert and living components and is a mix of plant roots, organic matter, arthropods (e.g., insects and spiders), minerals, oxygen, and water. Microscopic organisms are critical in healthy living soils and include bacteria, fungi, protozoa, and nematodes. As a noted soil expert explains, “everything that we do to improve soil health is really aimed at building and maintaining a diverse population of soil microorganisms.”

Here are some practices that will help increase populations of these beneficial organisms and result in healthy soil:

- **Soils will vary in different areas of your property.** An area of clay may be adjacent to an area of sand; an excessively moist area may be adjacent to a dry area. Have a soil test performed by a professional soil testing lab to understand your soil’s health, fertility, and physical characteristics. Once idiosyncracies of your site are identified, you can make improvements.

- **Feed your soils and boost populations of microscopic organisms.** Add a 1-inch layer of compost before adding a 1.5-inch layer of mulch. If you don’t already compost, now is the perfect time to set up circular bins made of four 5-foot metal T-posts, circled by 4-foot-tall rabbit fencing to create bins about 6 feet in diameter. We recommend three bins: one for new plant debris, one that is actively composting, and one that contains ready-to-use compost.

- **Go organic with garden products.** Inorganic chemicals and products can kill the microbes that live in the soils and that contribute to soil building and plant growth. Good soil is alive with good microbes.

- **Spray and feed plants and soils with fish emulsion.**

- **If available, apply composted horse manure.**

- **Just say no to herbicides: remove weeds before they go to seed.**

Make 2020 the year of healthy soils in your garden, and remember to dedicate time every year to boosting soil with these techniques. You will begin to see plants not just survive, but thrive. The secret path to a greener thumb is truly hiding in the soil.

**Simple Steps for Building Healthy Soils**

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**2019: The Year in Numbers**

*Friends of the National Arboretum & Washington Youth Garden*

<table>
<thead>
<tr>
<th>Event Description</th>
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<tr>
<td>54 Full Moon Experiences through Hikes and Forest Bathing Walks</td>
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<tr>
<td>25th annual Dinner Under the Stars</td>
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<td>Cherry Blossom 5K</td>
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<td>Summer Evening Concerts</td>
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<td>OAKtoberfest Fall Concert</td>
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<tr>
<td>Dinner Under the Stars</td>
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<tr>
<td>Garden Fair &amp; Plant Sale</td>
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<td>Native species restoration Springhouse Run</td>
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<td>Green Ambassador high school intern worked for 6 weeks on food &amp; stewardship projects</td>
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<td>Summer Institute for Garden-Based Teaching</td>
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<td>SPROUT trips at the US National Arboretum</td>
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<td>Garden Science partner schools</td>
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<td>Total Youth engaged in garden education</td>
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<tr>
<td>Total Youth engaged in food &amp; stewardship projects</td>
<td>5,720</td>
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<tr>
<td>Free or Reduced Price Lunch</td>
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<tr>
<td>Partner schools &amp; organizations received Free or Reduced Price Lunch</td>
<td>77%</td>
</tr>
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</table>

“*I am not sure they fully understood, before the trip, that food is something that you grow. They had the concept abstractly, but to see it concretely was very powerful.*

2nd grade teacher from Dorothy Height ES

Many thanks to our partners, gardeners, teachers, farmers, and supporters for helping us nurture curious minds and healthy bodies by connecting youth to food, the land, and each other.
Thank you...

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The David Fairchild Society, FONA’s highest level of membership, is a group of exceptionally dedicated supporters of FONA and the U.S. National Arboretum.

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HAPPENINGS

For more information, visit usna.usda.gov or fona.org

ANNUAL LAHR SYMPOSIUM AND PLANT SALE
Saturday, March 28, 8:30am–3:30pm
Join the nation's top practitioners of landscape design, ecology, and resource management to learn how you can apply their approaches, insights, and techniques. Registration required. Registration will open on the Arboretum’s website in February.

NATIVE PLANT SALE
Saturday, March 28, 8:00am–2:30pm
Sponsored by Friends of the National Arboretum

IKEBANA INTERNATIONAL EXHIBIT
April 3–12
National Bonsai & Penjing Museum

SEEKING VOLUNTEERS FOR THE 2020 GARDEN FAIR
FONA is on the lookout for volunteers to help during the weekend of the Garden Fair, April 25 and 26. We'll need help directing visitors, moving carts, and assisting at checkout. No experience necessary. Please email volunteer@fona.org for more details.

MARCH 28
Lahr Symposium and Native Plant Sale

APRIL 25-26
FONA's Annual Garden Fair & Plant Sale

JUNE 9
Dinner Under the Stars

STREAMING NOW:
Watch the Arboretum Bald Eagles through the Eagle Cam. See streaming video of the nesting pair at naeaglecam.org