In 1990, MUB proposed to strip mine the coal at Tibbs Reservoir. Neighbors packed City Council chambers to vote it down. Five years later, MUB proposed to timber the Tibbs and Mayfield Tracts. Concerned citizens including George Longenecker, Billy Joe Peyton, Frank Scafella and many others developed a management plan that eventually led to a 50-year lease to preserve and protect the 82 acres that the West Virginia Botanic Garden at Tibbs Run Preserve now calls home.

Around 20,000 people annually visit the Garden. Most are from our own community but many are from outside Morgantown as well. There are scores of examples around the world where green space within a community impacts all facets of life: it enhances both mental and physical health, creates environmental improvements to air, water, and wildlife, and provides economic advantages by attracting businesses and people to the area. Overall it seems like a win-win.

Within the Morgantown Community we are fortunate to have our City & County Parks, State Forests, Parks, Wildlife Management areas and of course the WVBG. When I reflect on all of the benefits that the Garden and greenspace provides to our community, I’m ever thankful to the group of people that had the vision to save the Tibbs Reservoir land and lease the land to the West Virginia Botanic Garden. It certainly has improved the quality of my life!

I thank all of you for your continued support and look forward to seeing you at the Garden.
This year has been a very lush one in the Garden. The constant rains of spring and early summer have been kind to the growing world of plants. The rain has been kind to those who work in the Garden as well, as the constant demands to water have been greatly decreased. That situation can change at any moment. Nothing is predictable in the life of a gardener.

The wet spring made the installation of the Event Lawn next to the Event & Education Center a slow process. One cannot work in soil when it is wet. The lawn is now installed, as is the beautiful walkway that bisects the green space. Biafore Landscape did a fine job in its construction and installation. We offer a very special thanks to the EQT Foundation for their generous funding of the project. The lawn will be tented for our August fundraising dinner, an Evening of Garden Delights. Please join us for this event. It supports the operating budget of the garden and allows for members of the Garden community to enjoy one another’s company.

The City of Morgantown provided funding for lighting the lower parking area and the drive to the Education & Event Center. Their funding also provided uplighting in some of the trees that surround the newly renovated Event Lawn. The space becomes magical at night with ethereal lighting up the trunks of the trees. There are also electrical outlets to supply supplemental power when needed, such as for music events.

I extend a special thanks to those who volunteer on Thursday mornings. We call ourselves the Garden Keepers. This is a very diligent group who work hard at what some would consider tedious tasks. Their efforts make a profound difference in how the individual gardens look. What I really enjoy is their company, their great conversation and divergent views of the world we live in. The West Virginia Botanic Garden at Tibbs Run Preserve is all about community, and this group always reminds me of that. There are many who contribute their time at the Garden and many who contribute their expertise and money. The Morgantown area is so lucky to have a community that supports the Garden and helps it grow.

Several families and our friends at Longshadow helped create the garden that you will find along the Long Walk (the straight part of the Reservoir Loop Trail on top of the former dam). Soon several benches will be added to the many plants and vessels that now decorate the space. This fall a large planting of spring flowering bulbs will be added, most will offer white blooms. You will find a number of plaques in the garden memorializing members of the families who funded it.

The sound of children has filled the Garden often this summer. Our ongoing series of summer camps allows children to explore the Garden and the natural world that surrounds us. It allows them to become comfortable in what many children now find as foreign territory. Their laughter, youthful inquisitiveness, and keen observations are comforting and a joy to witness. I was lucky to be exposed to such surroundings in my youth and am thankful to my parents every day for the experience. It is very much part of the reason I choose to spend my time at the Garden.

Wishing you all well.

Bill Mills
This March, we proudly welcomed 17 area girls, ages 9-12 (Grades 4-6), to celebrate Spring and launch our first year of Natural Wellness for Girls at the WVBG. This exciting new program, which encourages girls to embrace healthy lifestyles and forge a lasting connection with nature, was graciously funded by the Women’s Giving Circle of North Central West Virginia. Participants gained skills and knowledge from area experts in Nutrition/Exercise, Yoga/Mindfulness, Outdoor Recreation/Readiness, and Gardening, while supporting materials such as outdoor backpacks, yoga mats, healthy snacks, and container gardens were received so the girls could continue healthy lifestyle strategies as they grow. Below are a few comments by program participants and a parent speaking to the success of the program.

“I really enjoyed learning about ways to keep healthy and feel good about myself, especially as I grow up.” - participant

“I loved making new friends and being outside. The take-home materials were the best! I use my outdoor backpack and yoga mat for ‘me time’ every week.” - participant

“Thank you for such a positive program! Seeing my daughter learn firsthand about healthy ways to cope with changes as she grows was truly inspiring. I wish this program had been around when I was a young girl growing up!” - mother of a participant

We are excited about the community collaborations established through this pilot program, including partnerships with Girl Scouts USA, WVU Extension Service, Adventure WV Outdoor Education Center, Outdoor Women’s Alliance, Monongalia County Master Gardeners, and local area wellness educators. A special thank you to Guest Instructors Lisa Hynes, Emily Murphy, Ali Jeney, and Allie Kresen; and program supporters, Diana Scott, Sally Taylor, Erin Smaldone, Bill Mills, Linda Carson, Beth Nardella, Carrie Smith-Bell, and Greg Corio.

Welcome Caleb & Megan to the Staff of the Garden

The staff at the Garden has grown with the addition of two fine individuals. Each of them bring their unique skills to this organization. As the garden grows, a multi-faceted staff makes it yet a better place.

Megan Hauser started as the new Development Director for the West Virginia Botanic Garden on June 25! She has worked in the non-profit sector for the past 11 years in Morgan County, WV in the youth alcohol/drug prevention field. During her work there she became seasoned at developing community partnerships to accomplish common goals. She also developed her grant-writing and fundraising skills. She looks forward to utilizing these skills to meet the needs of the WVBG and to continue to expand her knowledge to continue to support its mission and vision. Currently she is working on increasing membership and gearing up for the 2018 Annual Appeal. Being a graduate of WVU, she is excited to return to such a vibrant community that offers so many social, cultural, and family fun activities and events.

Caleb Worley is a student at WVU pursuing a degree in Wildlife and Fisheries Resource Management. He is a natural fit here at the Garden. Caleb focuses on our grounds maintenance. You may see him out spraying milk as a deer deterrent, mowing the lawns, cutting brush, planting, and the never-ending task of watering. Caleb is a keen birder and helps in related research and banding. If you see Caleb out and about, you may consider asking him about his latest hike or birding experience.
WVBG Fall Activities Schedule (Continued on page 5)

Please pre-register for ALL activities. A link to register is at the end of each activity description on the activities schedule page of the WVBG website, www.wvbg.org.

September 1, 10:00 a.m. Arthritis and Gardening: Join Doug Cumpston, Assistive Technology Specialist with WV AgrAbility & WV Assistive Technology Systems to learn how arthritis can impact your ability to carry out gardening activities and what can be done to minimize its effect while gardening. The program will focus on techniques and tools that will help others overcome the limitations that arthritis can impose on the gardener. Most appropriate for adults. Free for WVBG members; $15 for non-members.

September 2, 2:00 p.m. Tree ID Walk: Broc Bowers, WVU Society of American Foresters club member, will help us identify and teach us about some of the trees found at the WVBG. Bring a tree ID guide if you have one. All ages. Free for WVBG members, $15 for non-members.

September 4, 7:30 p.m. Moth Program: Local naturalist and educator John Boback will present on moths in WV, moth diversity, moth identification, moths as pollinators, and what we can do to help moths. Then we will catch and identify some moths! Bring a camera or smartphone to take detailed moth photos! Most appropriate for adults and older children. Free for WVBG members, $15 for non-members.

September 7, 10:00 a.m. Friday Family Walk: Join WVBG Education Director Erin Smaldone on the first Friday of each month for a short nature-themed story followed by a walk around the Garden concluding with a simple craft. This easy, casual walk is a great way for children and their caretakers to get outside and enjoy nature and the company of others. The trail will accommodate “off road” strollers. All ages. Free for WVBG members, $10 per family suggested donation for non-members.

September 8, 10:00 a.m. – 1:00 p.m. Making Your Cell Phone Photos Sing: Take your cell phone photos from ordinary to fabulous! In this workshop with artist and author Linda S. Gribko, you’ll learn basic to advanced compositional techniques and will put them into practice while capturing the natural beauty of the Botanic Garden. By the end of the session, you’ll be seeing potential subjects with a new eye and will be able to produce interesting and satisfying nature photos using only your phone. (Please bring along a cell phone camera that you know how to operate). Ages 14 and up. $20 for WVBG members, $30 for non-members.

September 9, 2:00 p.m. WVBG Citizen Scientists: Magnificent Monarch Butterflies: Join us at the WVBG Butterfly Garden and learn about the Monarch butterfly life cycle, magnificent migration, habitat needs, and conservation opportunities for citizen scientists and gardeners of all ages. Led by WVBG Education Specialist Stacy Clovis-Woofter, this program and walk will also feature national conservation efforts by National Wildlife Federation and Monarch Watch. All ages. Free for WVBG members, $15 for non-members.

September 16, 2:00 p.m. Mushroom Walk: WVU Professor of Mycology Dan Panaccione will lead us in search of forest fungi. He will show us how to identify the native mushrooms at the garden by their unique characteristics. Emphasis will be on general biology, not edibility. All ages. Free for WVBG members, $15 for non-members.

September 21, 6:30 – 7:45 p.m. Sunset Yoga and Meditation: With yoga instructor Heidi Sherwin, fall into the peace within and the beauty of nature during a special yoga practice in honor of the Autumn Equinox and the International Day of Peace. As the sun sets over the Botanic Garden, practice grounding and heart-opening yoga postures to better align with the rhythm of the autumn season. Learn breathing and relaxation techniques to release tension and create a quality of ease in the mind and body. The class will end with a group meditation focused on creating peace and goodwill in our communities. All levels are welcome. $20 for WVBG members, $30 for non-members.

September 29, 8:00 – 11:00 a.m. Bird Day: Celebrate our avian friends at the Garden! Join us for a fall bird walk led by David Daniels, local birder and Field Trip Coordinator for Mountaineer Audubon (8:00 a.m.) followed by a live bird presentation by the Avian Conservation Center of Appalachia (10:00 a.m.). Offered for free in conjunction with Mountaineer Audubon and ACCA.

October 1, 10:00 a.m. Young Birders Walk: It’s never too early to become a birder! This walk will introduce children of all ages and their parents to the wonder and joy of birds and bird watching. Bring binoculars and a bird guide if you have them. This walk is offered in conjunction with the West Virginia Young Birders Club and will be led by Avian Conservation Center of Appalachia’s Director Katie Fallon. All ages. Free.

October 20, 1:00 – 4:00 p.m. Landscape Painting with Watercolor: Celebrate Autumn’s stunning beauty by attending a landscape painting workshop led by retired Art Professor and West Virginia artist John C. Clovis. With a strong focus on process and self-expression, learn how to choose what to paint, make preliminary sketches, and create a watercolor painting with focus on specific artistic elements. Workshop will include demonstrations of specific techniques as well as one-to-one guidance, and is most appropriate for participants of intermediate skill level ages 16 and up. $40 WVBG Members, $55 Non-Members.

October 21, 2:00 p.m. Nature in Fall: Fall is a time of preparation and change. Join WVBG Education Director Erin Smaldone to learn about what is happening in nature and at the Garden during the fall. The program will include a slide presentation followed by a walk. All ages. Free for WVBG members, $15 for non-members.

November 4, 2:00 p.m. Early November Tree Walk: Retired WVU Arboretum Specialist Jon Weems will lead this walk emphasizing tree lore, including fall colors, tree identification tips, and historical uses of different trees. With Jon’s wealth of tree knowledge, you are sure to learn something interesting and new. Free for WVBG members, $15 for non-members.

(Continued on page 5)
November 17, 1:00 p.m. – 4:00 p.m. Nature Drawing – Twigs: Rendering Cylindrical Volume and Tiny Details*: Learn to draw, or sharpen your skills, using nature as your inspiration. In this workshop with artist and author Linda S. Gribko, you’ll take a walk in the late autumn woods to select a twig to draw while picking up some woody twig identification skills and learning a bit of traditional tree lore. In the education center, you’ll create a graphite drawing of your twig with emphasis on expressing volume, detail, and your own artistic flair. Materials are provided, but it’s recommended you bring a small battery operated desk lamp to light your subject. Ages 14 and up. $30 for WVBG members, $45 for non-members.

November 17, 7:00 p.m. Owl Walk: David Daniels, local birder and Field Trip Coordinator for Mountaineer Audubon, will lead an owl walk. Learn to identify on sight or by calls. Wear warm clothing and walking shoes. Bring a flashlight. Free for WVBG and Audubon members, $15 for non-members.

* All activities take place at the West Virginia Botanic Garden, 1061 Tyrone Rd., Morgantown, WV 26508

* Programs will last approximately 1.5-2 hours unless otherwise noted.

* Please register for all activities online at www.wvbg.org. If you have questions, call 304-322-2093 or email erin@wvbg.org.
Discovering Beech Bark Disease at the WVBG
by Cameron Stauder, PhD student, West Virginia University

Put on your boots, and let’s go on a hike. Leaving our cars in the parking lot, we head for the wetland boardwalk. After passing over the wetland, we enter a mature, oak-dominated forest. The sound of a Pileated woodpecker (*Hylatomus pileatus*) searching for his next meal under the bark of a recently killed ash tree resonates throughout the forest. There is a pause... he likely has found an Emerald ash borer larvae (*Agrilus planipennis*) to enjoy. As we follow the trail, our eyes adjust to the dim light created by the dense Eastern hemlock (*Tsuga canadensis*) canopies above. Thickets of rhododendron (*Rhododendron maximum*) begin to appear as we approach Tibbs Run. Although we cannot yet see the water, we hear it as we follow the winding trail to the stream crossing. Looking up, we find ourselves surrounded by majestic Eastern hemlock, black birch (*Betula lenta*), and American beech (*Fagus grandifolia*) trees.

As we admire our surroundings, we notice something odd about the American beech trees. Where we expect to find smooth bark with the occasional proclamation of love engraved into its trunk, we instead find an abundance of cracks and depressions. White, cottony tufts, reminiscent of the hemlock wooly adelgid, can be found around the edges of these sunken lesions. In the centers of those lesions, tiny clusters of red grape-like structures have pushed their way through the bark. We begin to find more and more of these strange globular clusters along the entire trunk of the tree. A thought comes to mind... “oh no”.

Maybe you have encountered this tree disease before, maybe you haven’t. Either way, beech bark disease has made its way to the West Virginia Botanic Garden. This disease is a complex comprised of several different organisms that play a role in a successional series of events. First, the exotic scale insect (*Cryptococcus fagisuga*) is carried by the wind or maybe even a hiker’s boots into a forested stand with beech trees. These small insects were first introduced in Nova Scotia around 1890 and have slowly been making their way south. Woolly beech scales are comprised of solely female individuals which require no male to reproduce, a phenomenon called parthenogenesis. In the next years, this scale population will explode as it increases in number and spreads to adjacent beech trees. Using a specialized piercing-sucking mouthpart called a stylet, these tiny insects feed off from the sap into its trunk, we instead find an abundance of cracks and depressions. White, cottony tufts, reminiscent of the hemlock wooly adelgid, can be found around the edges of these sunken lesions. In the centers of those lesions, tiny clusters of red grape-like structures have pushed their way through the bark. We begin to find more and more of these strange globular clusters along the entire trunk of the tree. A thought comes to mind... “oh no”.

You may be asking, “Is there any hope?”, and fortunately, efforts to develop resistant beech varieties are underway. Approximately one-percent of the American beech occupying our eastern forests is considered resistant to scale infestation. Through this resistance to scale infestation, the disease is halted as it requires prior scale infestation to induce the susceptible state for invasion by the *Neonectria* fungi. Members of the United States Forest Service, as well as a number of academic institutions are working diligently to further understand this long entrenched disease of American beech in hopes of mediating its impact to conserve the natural state of our forests.
What’s a Perennial membership? It is a self-renewing membership that allows you to set up recurring automatic payments toward your membership on either a monthly or an annual basis. Memberships at any level can be set up to automatically renew annually. You could also choose to make 12 monthly payments ($5.00 minimum/month). For example, you could enjoy the benefits of a Contributor level membership ($100 annually) for only $8.34 a month! Become a Perennial member by signing up on the WVBG website (wvbg.org) and authorizing automatic payments using a credit or debit card. You don’t have to do anything else to keep your membership current (unless you want to change the amount or decide to terminate the automatic payments). How easy is that?!

Perennial members will not be bothered with annual renewal reminders and will receive a new membership card each year in the anniversary month of their initial Perennial membership contribution. This kind of contribution makes membership easy for you, cuts down on paper and mailing costs, and provides WVBG with sustainable funding. Become a Perennial member today!

Welcome to the Following New Members Who Joined Between 4-1-18 and 6-30-18

<table>
<thead>
<tr>
<th>Contributor</th>
<th>Household</th>
<th>Household</th>
<th>Individual</th>
<th>Individual</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rachael Buchsbaum</td>
<td>Andrea Antion</td>
<td>Kristin Moilanen</td>
<td>Kevin Brockett</td>
<td>Pat Stanton</td>
<td>Ryan Brown</td>
</tr>
<tr>
<td>Lyn &amp; Susan Dotson</td>
<td>Rachel Barnes</td>
<td>Pamela Murray</td>
<td>Doris Dailey</td>
<td>Ruth Tunick</td>
<td>Alanna Higgins</td>
</tr>
<tr>
<td>Katrina &amp; Trevor Lloyd</td>
<td>Josh &amp; Cassie Caplan</td>
<td>Timothy Neims</td>
<td>Rebecca Diaz</td>
<td>Marianne Vaughn</td>
<td>Alice Morgan</td>
</tr>
<tr>
<td>Cathy and Chad Mezera</td>
<td>Mary Cumberledge</td>
<td>Darlene Pallay</td>
<td>Larry Guzzi</td>
<td>Debbie Warner</td>
<td>Heather Myers</td>
</tr>
<tr>
<td></td>
<td>Vaike Haas</td>
<td>Bjorn &amp; Ann Soderberg</td>
<td>Gwen Marshall</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you have any questions about membership, see our website, www.wvbg.org or call 304-322-2093.

Join the Friends of the West Virginia Botanic Garden Today!

<table>
<thead>
<tr>
<th>Membership Level</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Year</td>
<td>Free admission/discounts at 300 gardens in US*</td>
</tr>
<tr>
<td></td>
<td>Periodic WVBG Newsletters</td>
</tr>
<tr>
<td></td>
<td>10% discount on retail merchandise (except sale items)</td>
</tr>
<tr>
<td></td>
<td>Invitations to members-only events</td>
</tr>
<tr>
<td></td>
<td>Reduced price on special activities (such as workshops)</td>
</tr>
<tr>
<td></td>
<td>One-year subscription to a complimentary magazine*</td>
</tr>
<tr>
<td></td>
<td>Discounts at participating nurseries and garden centers*</td>
</tr>
<tr>
<td></td>
<td>Free admission to one workshop (up to $50)</td>
</tr>
<tr>
<td></td>
<td>Private small group tour of WVBG (up to 10 people)</td>
</tr>
<tr>
<td></td>
<td>One hour home garden consultation</td>
</tr>
<tr>
<td></td>
<td>Use of Welcome Center for up to 20 people for three-hour event</td>
</tr>
<tr>
<td></td>
<td>Use of Welcome Center for up to 100 people for six-hour event</td>
</tr>
</tbody>
</table>

*PLEASE NOTE: Individual/student member benefits apply only to the individual named on the membership.
* Visit the American Horticultural Society Website for listings and information about the Reciprocal Admissions Program.
* Magazine subscription to Better Homes and Gardens or Martha Stewart Living, details will be provided.
* Visit wvbg.org for more information about nursery and garden center discount.

Name_______________________________________________________________________________________Preferred Telephone #_______________________________
Address___________________________________________________________________City________________________________________State______Zip___________
Email______________________________________________  (Provide email to receive WVBG updates, including link to online newsletter.)

□ Check here if you prefer to receive newsletter by postal mail.
□ Contact me about gift memberships.
□ My company has a matching gift program, and I have enclosed the form/information.

WVBG may publish my name. □ Yes □ No
I am including an additional tax-deductible contribution of $_____________________

Please make checks payable to West Virginia Botanic Garden, Inc. and return form with payment to: WVBG, 714 Venture Dr., PMB #121, Morgantown, WV 26508. Thank you!
Sitting in my office on a Wednesday afternoon this spring, I heard a knock on the back door. I looked inquisitively at my co-worker Cheryl. “Probably the Lindas,” she said. Sure enough, I opened the door to greet Linda Blake and Linda Huffman, AKA “the Lindas,” here to work on the library project. They both volunteered to help organize a number of books that had been donated to the WVBG over the years. For Linda Blake, it was a perfect fit. After all, she does have a Master’s degree in Library Science and currently works as a librarian at West Virginia University. Linda Huffman, retired from WVU and NIOSH as a research scientist, was happy to help out. Both Lindas were already volunteers with the Botanic Garden, serving as weekend greeters. In addition, they both have helped out at special events and Linda Huffman serves as a program assistant.

The library project involved developing a classification system, searching in libib, an online book catalog, and making “call number” labels for each book based on topic and author. Summer Intern Sarah Weaver also pitched in by searching for and adding photos of the books to the libib catalog. The library to date contains a scholarly collection of books on rhododendrons, a number of field guides and books covering plants and other natural history related topics, garden design, and more. The library has two sections, one for adults and one for children. Currently, the adult books are located upstairs in the Education and Event Center, and the children’s books are downstairs. In the future, the library will be housed in the WVBG Visitor Center (not yet built). Visitors can search the collection at wvbg.libib.com. Currently, if you want to read a book in the WVBG library, you must call for an appointment. As this is not a lending library, books cannot leave the WVBG. The WVBG does also have a “Little Lending Library,” which was donated by the Lions Club and is located in the lower parking area. Visitors are free to take or leave books there. If you are interested in donating to our library, please contact us for a donation form.

We thank the Lindas for helping us with this project. When I asked them what they enjoy about volunteering at the Botanic Garden, Linda Huffman replied “I believe in the concept and want to support the Garden. I feel a real sense of community here.” Linda Blake said she enjoys talking with the wide variety of people who visit the WVBG. She also is happy to be part of the WVBG team. “Everyone is working in support of the mission. I just love it.”