



The


DIG

& grow
COURSE CATALOG

norfolk
botanical
garden

JANUARY—APRIL 2020

From the President

Printed on 100% recycled paper. 



Michael P. Desplaines with IKEA Norfolk Loyalty Manager Michelle Stephenson and volunteers on longleaf pine planting day.

Christmas wreaths of evergreens, the candlelight of Chanukah and mistletoe of the ancients visible on so many bare, deciduous trees, are all behind us now (well except for the mistletoe which seems to have taken over one of my maples!).

Winter into spring has always been a favorite time of mine. As a New Englander it meant you had survived 6 months of winter. As a gardener it meant you could finally start digging again. Nothing was more anticipated than the seed catalogs which arrived in the dead of winter. Getting out there and reconnecting with the Earth was such a special time.

Crocus coming up through the snow proved we had survived—and another glorious season would be upon us.

Here in Coastal Virginia it's the daffodils that get me excited. Scented, unscented, doubles, large and small cup varieties, whites and yellows, pinks and oranges—what a sight. Hardy, reliable, perennial and welcomed grandly every spring. They remind me of our community—different, varied, resilient and most of all, welcoming! I hope you'll join us this season for our Nature Connects® Art with LEGO® Bricks, Daffodil Daze, and a visit to the top of the renovated and restored NATO Tower.

Take every opportunity you can to connect to nature this season—whether here at NBG or at home. You'll be glad you did.

In Loving Memory of Margaret "Peggy" Beale, NBG Board of Directors, October 13, 2019

Peggy was a Norfolk native, a graduate of Maury High School and Meredith College. She was a beloved Garden Board Member, community activist, and philanthropist. Her kindness, passion for education, and helping others was contagious. Peggy was also devoted to the family business, the Paxton Company for 42 years. She most recently served as the company CEO, using her talents and passion to guide the company's success. She served on many local boards and was recognized by Meredith College with the Distinguished Alumna Award and the Alumna Philanthropy Award. She is greatly missed by her family, friends, employees, and all of us here at Norfolk Botanical Garden. Her family says she loved generously, cared deeply and left the rest to God.



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A Calendar of Blooms

January



While the number of plants that bloom in January may be limited, one plant makes up for it by providing showy bright color at the bleakest point in the calendar. Winter jasmine (*Jasminum nudiflorum*) with masses of bright yellow flowers prefers full sun to partial shade and is very easy to grow. Here at NBG you can see them lining the steps leading to Renaissance Court from the Holly Garden.

February



Edgeworthia (*Edgeworthia chrysantha*) is sometimes referred to as paperbush, but so are other plants, so to avoid confusion we stick with Edgeworthia. One whiff of their mid-winter flowers and you will want to have one for yourself. Edgeworthia prefers partial shade in moist soil that drains well. We will have a very limited number of Edgeworthia available at our annual plant sale in May, so get there early.

March



What would a garden in Coastal Virginia be without one or two camellias (*Camellia japonica*) blooming in March? These sturdy evergreens prefer partial shade. There are many varieties with flowers ranging from pink, white, and red with many combinations in between. This year, our Hofheimer Camellia Garden will receive a lot of attention as the **American Camellia Society will host their annual convention here in Norfolk, March 13th—17th.**

April



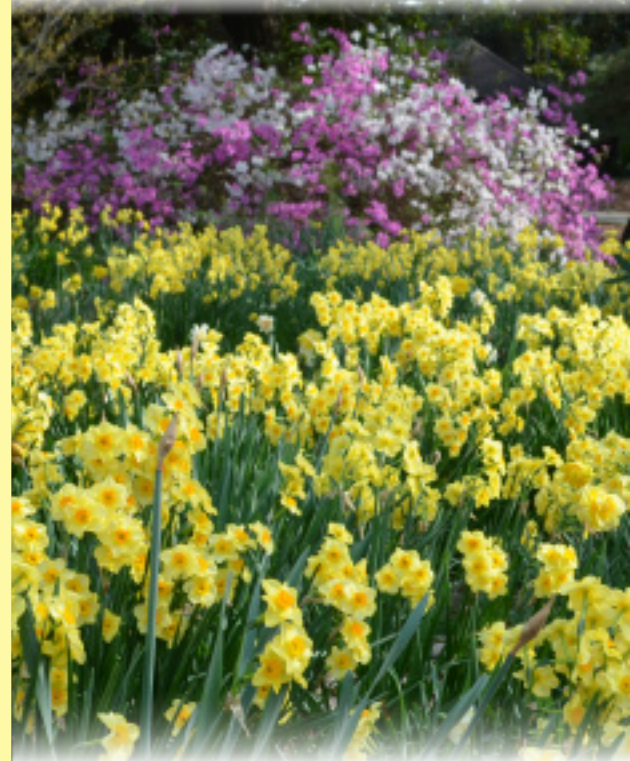
Most of the azaleas you see in local landscapes are evergreen Asian azaleas. However, Coastal Virginia is home to several native azaleas including the Swamp azalea (*Rhododendron viscosum*) and Pinxtergloom azalea (*R. periclymenoides*). The coastal azalea shown at left, (*R. atlanticum*) has white flowers striped with pink. Unlike the Asian azaleas, this native azalea is deciduous and has wonderfully fragrant flowers.

Daffodil Daze



49,000 bulbs were planted last fall—29,000 were daffodils!

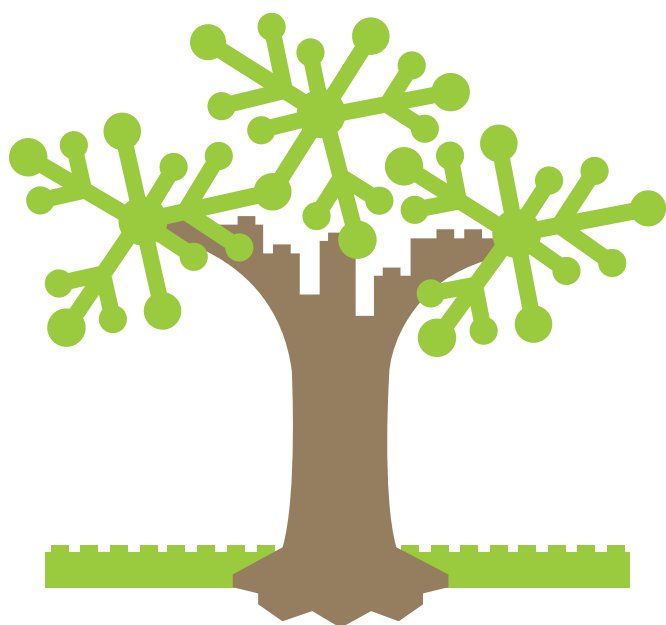
That's in addition to the more than 300,000 existing bulbs.



Don't miss the spectacular bloom during the first 3 weeks of March.



January 17 — June 7, 2020



NATURE CONNECTS®

ART WITH LEGO® BRICKS

PRESENTED BY



CAPITAL
GROUP®



*If you love LEGO® bricks,
you'll love Nature Connects®,
Sean Kenney's exhibit of giant sculptures!*

The wildly popular Nature Connects® Art with LEGO® Bricks is coming to Norfolk Botanical Garden for the first time beginning January 17TH and will run through June 7TH. Created with half-a-million LEGO® bricks, the award-winning exhibit by New York artist Sean Kenney will feature 13 displays throughout the Garden. Many of the sculptures are larger-than-life and highlight the connection between all living things. A signature sculpture is the Monarch butterfly, built from 37,000 LEGO® bricks. This piece draws attention to protecting the habitat of this beloved native pollinator. In addition, this exhibit will also include a hands-on play zone where guests can build their own creations using LEGO® bricks.

Flower Shows & Sales

Included with Garden Admission



**Virginia Camellia Society
Spring Show & Sale**

Sunday, March 15
10 AM — 3 PM



**Tidewater African Violet Society
Show & Sale**

Friday — Sunday, April 17 — 19
10 AM — 4 PM

Art of Play

Adults and children of all ages are invited to experience The Art of Play exhibit coming to the Garden beginning mid-March 2020, just in time to enjoy warmer temperatures. Four talented and creative artists from Virginia have designed interactive artwork that will connect art and nature in a playful way. Add the Nature Connects® Art with LEGO® Bricks exhibit and you have a perfect day to enjoy the beauty of Norfolk Botanical Garden. Come early and come often because these four whimsical installations will only be here for 2 months!

The WOW Children's Garden will incorporate LEGO® bricks as a new and exciting means of connecting children and families with nature. Beginning in mid-January, free-play LEGO® brick tables will offer families a place to build their own garden-themed structures inspired by the Nature Connects® installations. In the spring, WOW will offer self-guided and guided activities using LEGO® bricks to encourage continued nature and STEM-based exploration and learning. Exclusively in March, April, and May, WOW will additionally offer a LEGO®-themed birthday party option.

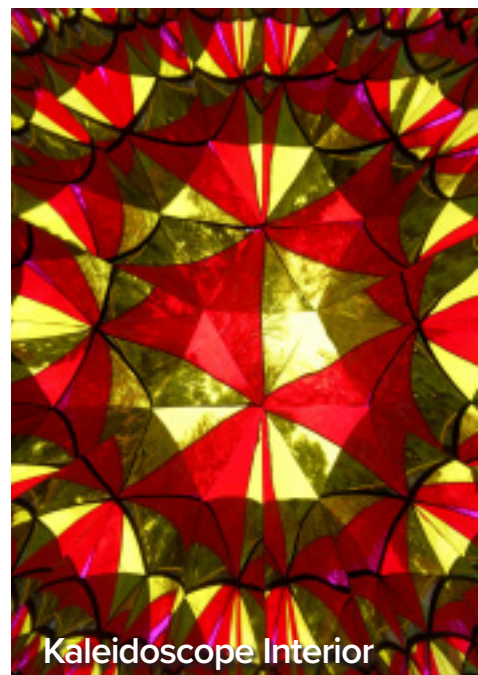
Arriving in March



Moon Bounce Seesaw



Kaleidoscope



Kaleidoscope Interior

ART in BAKER HALL

Included with Garden Admission

Bugs, Blossoms and Beyond
January, 2020



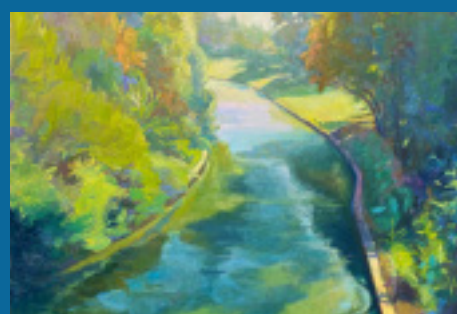
An Exhibition with Encaustics
and Other Media
by Michele Barnes

Marsh Madness
February, 2020



Nature Photography
by Sandi Lee Snider

Singing in Color
March/April, 2020



Vibrant Oils
by Janice Gay Maker

Green Scene



Reflecting on Earth Day

No matter your level of environmental activism everyone has a stake in creating and maintaining a sustainable future. As Earth Day approaches it's 50TH anniversary in April, there is a growing awareness that urgent action is required to make the environment a priority. The first Earth Day was intent on bringing environmental issues into the forefront of the national conversation. Rachel Carson's book, *Silent Spring*, is credited with laying the foundation for the modern environmental movement and inspiring the need to recognize that the Earth's natural environment is precious and in need of protecting.

Earth Day is more than just one day set aside as a reminder to recycle or pick up litter. It's a time to critically reflect on the current state of the environment on both a local and global scale and how everyone can readjust their daily actions to better influence the trajectory of long-term environmental changes.

Change never comes easy, but remember little changes will have a collective impact. In this uncertain time of climate change, we're approaching an apex where it's imperative to renew our commitment to protecting our environment. It's time to up the ecological merit of our gardens by adding native plants, investing in low carbon and renewable energy sources (think LED and solar power), and eliminating our over consumption of plastics by switching to reusable products. Norfolk Botanical Garden is committed to environmental activism and stewardship so we encourage you to join us on our journey to become the change we seek!

Glyphosate Reduction Program Update

This fall, the Horticulture staff completed their study comparing the effectiveness of glyphosate, the active ingredient in Roundup®, to several alternative herbicides. Their findings show promise with two of the plant-based herbicides, d-limonene and pelargonic acid. Staff are now discussing ways to incorporate the use of these products into next season's maintenance regimen. We will keep you updated on our research.

Community Connections

We always enjoy being a part of the excitement the fall season brings to the gardening community across Tidewater. From environmentally themed festivals to volunteer fairs and garden club meetings, we connected with folks from every corner of the seven cities.



NBG Youth Educator Kim Harmony answers questions from Children Festival attendees at Harbor Park in October 2019.



NBG Director of Environmental Engagement & Outreach Theresa Augustin had the opportunity to teach about mushrooms growing in the woods of Sleepy Hole Park in Suffolk.



Leaping to **SOLUTIONS** Climate Change Symposium

LEAP DAY
February 29, 2020
10 AM — 4 PM

Registration Deadline February 27TH - Visit NBGgreen.org

Climate change is a topic of daily conversation these days. Scientists have well-documented evidence that human activity, starting with the dawn of the industrial revolution, is the driving force behind these changes. During our November 2018 symposium, we touched on the topic of climate change and the response was overwhelmingly positive. Attendees genuinely appreciated the chance to hear the facts and gain a better understanding of climate change basics.

Based on that feedback, we're focusing this symposium solely on climate change. Come join us on Leap Day, Saturday, February 29, 2020 to expand on the basics and have the chance to hear from local officials on how cities in the Tidewater area are preparing to mitigate the challenges associated with sea level rise.

Cost: \$50 for members; \$60 for not-yet-members

Registration includes lunch

SYMPOSIUM AGENDA:

10:00—10:15 AM	Welcome from Norfolk City Council member, The Honorable Andria McClellan
10:15—11:15 AM	Dr. Michael Allen, Assistant Professor of Geography, Department of Political Science & Geography, Old Dominion University <i>Climate Science 2020: National Perspectives; Global Interactions</i>
11:20 AM—12:20 PM	Dr. Jeremy Hoffman, Chief Scientist at the Science Museum of Virginia <i>Preparing for a Hotter, Wetter, Sneezier, and Wheezier Virginia</i>
12:20—1:45 PM	Lunch and exploration of ERP's Youth Resilience Expo (see below)
1:45—2:45 PM	Skip Stiles, Executive Director of Wetlands Watch <i>Responses to the Changes We are Seeing</i>
2:55—3:55 PM	Moderated Panel Scott A. Smith, City of Norfolk Public Works, Coastal Resiliency Charles J. Bodnar and Sue E. Kriebel, City of Virginia Beach Public Works, Stormwater Engineering Center

As an added bonus that day, Elizabeth River Project will host their 2nd Annual Youth Resilience Expo. See how students in grades K-12 envision solutions to address flooding, promote resilience actions and reduce their carbon footprint at their schools. We've built in extra time during lunch for symposium attendees to enjoy these innovative solutions.



10 Years of Research

Southeast Virginia Phenology Network

Norfolk Botanical Garden (NBG) is contributing to research on how climate change impacts plant systems. Started in 2010, the Southeast Virginia Phenology Network is a partnership between Old Dominion University (ODU) and Norfolk Botanical Garden to assess phenological changes in native plants that are associated with local changes in temperature and/or precipitation. Phenology is the study of the timing of life cycle stages, known as phenophases, in plants and animals. For centuries people have used phenological observations to mark the beginning and ending of seasons. Tourism around the world also relies on the steadiness of phenological changes, for example in cherry blossom festivals and wildflower pilgrimages in the spring and the changing of leaf colors in the fall.

Commonly studied plant phenophases include flowering, fruiting, leaf emergence, and leaf senescence. Transitions among phenophases are known to be influenced by environmental factors, especially temperature and sunlight. Thus, collecting data on these stages on a regular basis gives scientists insight into how annual changes in climate impact plants around the world.

At Norfolk Botanical Garden, ODU researchers, including Dr. Tatyana Lobova, Dr. Lisa Wallace, and their students collect weekly data on seven native species, including red maple (*Acer rubrum*), loblolly pine (*Pinus taeda*), mayapple (*Podophyllum peltatum*), switchgrass (*Panicum virgatum*), flowering dogwood (*Cornus florida*), common buttonbush (*Cephalanthus occidentalis*), and highbush blueberry (*Vaccinium corymbosum*) in the Virginia Native Plant Garden, Enchanted Forest and around Mirror Lake. The data are provided to the USA National Phenology Network and used by researchers around the world to study local, regional, and global changes in plant phenology.

From these data, we have learned that temperatures at the Garden have been increasing since 1980 at a rate of approximately 0.0265°C per year. In only a short period of monitoring (2010–2016), Dr. Lobova found that four species (mayapple, flowering dogwood, common buttonbush, and highbush blueberry) show sensitivity to changing temperatures, although common buttonbush is the only species with a significant shift to later flowering and fruiting in association with the changing temperatures. Temporal shifts in phenophases mean that plants may reproduce less if their pollinators have not also shifted. Additionally, because plants form the basis for most ecosystems on Earth, what happens to them has a cascading effect. The many animals relying on plants for their food and habitats are vulnerable to unavailability of plant resources when they need them most. For us, these shifts could mean we miss seeing our favorite plants in flower, have increasingly longer allergy seasons, have fewer fruits to eat from favorite crops, and see fewer pollinators in our gardens.

Because biological systems change very slowly and climate also fluctuates from year to year, long-term data sets allow scientists to distinguish short-lived events from long-lasting shifts in phenophases. As we look to the next decade of this partnership between ODU and NBG, we hope to begin monitoring new species in the Garden. We also encourage visitors to the Garden to become citizen scientists by submitting their own phenological observations to the National Phenology Network (https://www.usanpn.org/natures_notebook) or even uploading plant photographs to iNaturalist.

Rain Barrels

Beautiful & Beneficial

What comes to mind when someone brings up a rain barrel? If it's still a large, unsightly drum attached to your gutter – have we got news for you! Check out our rain barrels on display in the Potager Kitchen Garden, where you'll see a classic 55-gallon drum, but you'll see decorative alternatives as well! From sleek and stylish rain barrels widely available online, to the amazing hand-painted one created by staff member Julia Goforth, the options are truly endless when design is involved.

As for the benefits of rain barrels, we know that they capture and store water for later use, but why is that important? First and foremost, they are saving water. According to the EPA, 40% of residential water use is for lawns and gardens. Storing and using rain water later is great for saving money on that water bill in the dry months, but the main goal of a rain barrel is to decrease stormwater runoff, which picks up all kinds of pollutants and debris as it makes its journey to our waterways. As more runoff sheets across impervious surfaces, it gains not only volume, but speed, which then leads to erosion issues as soil is scraped away from stream banks. Sediment is actually the 3rd major pollutant of the Chesapeake Bay! Using rain water is also beneficial for plants, as it doesn't contain the same additives that tap water does, which eventually build-up in the soil over time.

If you're looking for more information on rain barrels, the Elizabeth River Project has super-size barrels for sale, including delivery and installation! Just visit their website to apply. Lynnhaven River Now also has a variety of rain barrels for sale, providing different colors and sizes, as well as optional upgrades. The good news is you're supporting a wonderful organization either way! Keep an eye out for workshops in your local area. Newport News Master Gardeners have already published their 2020 calendar with upcoming dates. Call the Virginia Extension Office at 757-591-4838 for more details and registration.



Staff Spotlight: Jasmine SmithBanta

Jasmine SmithBanta can be described through many of her passions and experiences that led her to where she is today. She is a veteran, a native of Jacksonville, Florida, a volunteer, a nature advocate, and an NBG employee.

Jasmine came to the area through the Navy and was stationed aboard the USS George H.W. Bush as an Aviation Ordnanceman. Her first experience with NBG was during a group volunteer project. She fell in love with the Garden and looked for more opportunities to connect. She enjoyed visiting NBG in her free time and purchased a Garden Family Membership. She also purchased a memorial brick to honor a friend who was an educator with an interest in nature and preserving the environment.

As Jasmine's military career was ending, she applied to the Skill Bridge program. Skill Bridge connects transitioning service members to career job training opportunities. The program is through the Department of Defense and arose through the annual need of 200,000 members of the U.S. Armed Forces separating from active duty and re-entering the civilian work force. Knowing she wanted her time with the Skill Bridge program to be spent at NBG, Jasmine started as a horticulture intern. Her hard work and positive attitude led to an internship in the Events department. With the help of the Skill Bridge program she completed a six-month internship in which she developed new event management skills and valuable experience.

Processing out of the Navy and coming to NBG was a drastic change. Jasmine said that coming from a high stress environment to NBG has been therapeutic. At the conclusion of her time with Skill Bridge, Jasmine was hired as a Venue Coordinator in the Events department. "My current position helps me clean up my carbon footprint, it helps me connect people to nature and I help make guests' lives better. Being here in my happy place as an employee has been a blessing," she said.



Volunteer Earns International Recognition

Floral designer Rie Russo recently traveled to Japan where she acquired a second level Shihan instructor certificate from the Koryu school of Ikebana—a notable level that can take up to eight years to achieve. Rie is excited to share her passion with garden guests through her many arrangements created for the Baker Hall front desk and Administration building. As a 6th year volunteer, she has contributed over 300 volunteer hours. Ikebana, the Japanese art of flower arranging that emphasizes form and balance with minimal materials, is experiencing a boom in popularity in the United States since its introduction to California in the 1950s. A common trait of Rie Russo's Ikebana arrangements is the use of a kenzan, a pointed needle used to hold and secure flowers.

Want to learn more about Ikebana? Register for Rie's upcoming Ikebana six-week class beginning on April 22 (see enclosed *GROW* Course Catalog).



Tribute Opportunities

The beauty, wonder and serenity of the Garden combine to create a perfect setting to honor a loved one, pay tribute to a friend, or mark a special anniversary or milestone. Select from a number of sites in the Garden to place our teakwood bench, complete with commemorative plaque. Please call Cathy Fitzgerald at 757-441-5830 ext. 319 or email her at cathy.fitzgerald@nbgs.org to make an appointment or discuss all tribute opportunities.

Evergreen Society Members

The Evergreen Society recognizes and celebrates an outstanding group of friends who generously support the Garden beyond their lifetimes. If you are interested in learning more about the Evergreen Society, methods for making a planned gift, or alerting the Garden to a gift in your estate plan, please contact us.

Annette Averitt, I.M. & Sarah Lee Baker, Ty & Martha Brown, Elizabeth Bruce, Blanche C. Chappell, Robert & Janie Creecy, Cindy Cutler & Craig Haines, Sandra L. Dashney, William W. Eley, Richard & Eleanor Evans, Cathy Fitzgerald, Joe Foreman, Jane Frazier, Robert M. Gostel, Randy Harrison, June Hoyer, Kit E. Johnson, Karen S. Gershman, Karen L. Hines, Edward C. & Betty Lou Johnston, Sr., Patricia A. Kiefer, Patty L. Landrum, Eleanor Marshall, Bee McLeod & Goody Tyler, Rick Morsink, Susan Elise Morton, Nancy Nelson, Edward & Gayle Nichols, Susan L. Oldridge, Brian O'Neil, Dana Parker, Stephanie Pope, Mildred Amsinger Powers, Judy Pravecek, Ann Rathbone, Pamela Read, Alan Rohanna, Kurt & Debbie Schroeder, Sam Strickland, George & Nancy Sutcliffe, Sylvia E. Simons Trembelas, Jim & Christiane Valone, Richard & Ann Weber, Pearl Windle, 3 anonymous.

Be part of the Garden's Evergreen Society and help ensure a vibrant future for the Garden.

Leaving a Legacy



WPA Memorial Garden Heritage Celebration

Saturday, April 18, 2020

11 AM — 2 PM

Join us for a ceremony in Rose Garden Hall to honor the 220 African-American women and men who first planted the Garden over 80 years ago through the Works Progress Administration.

Tram tour and reception to follow.

Free admission until noon.



norfolk botanical garden

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Take Our Path

Pledge to make a single but significant lifestyle change. By sticking to it, you can have a lasting impact.

BURN LESS

- Use cars less. Ride a bike or use public transportation
- Drive electric powered vehicles instead of gas driven
- Go solar or convert to wind power
- Obtain renewable energy credits through Dominion Energy or Arcadia Power

PLANT & COMPOST

- Plant a tree! One tree can absorb up to a ton of CO₂ in its lifetime
- Start a compost pile

EAT LESS MEAT

- Meat production is one of the biggest carbon emitters in the world
- Meat production makes up 14-18% of total greenhouse gas emissions.

DITCH DISPOSABLES

- Ditch plastic bottles, bags, straws and cutlery
- Instead, use items you can use again and again

THE GARDENS OF ENGLAND

SEPTEMBER 7 — 18, 2020

Join Brian O'Neil
NBG Director of Living Landscapes

Some of the Gardens you will visit:

Highgrove Royal Gardens

Barnsley House

Stourhead House

Blenheim Palace & Garden

Kensington Palace & Gardens

Kew Gardens, and others!

For More Information Contact:

Slaydon's Travel

757-484-4015