

UNITED STATES BOTANIC GARDEN

# Calendar of Events

September-November 2015



# The United States Botanic Garden

**The United States Botanic Garden** (USBG) is a living plant museum. It is open daily from 10 a.m. to 5 p.m., free of charge. Exhibits interpret the role of plants in supporting earth's diverse and fragile ecosystems and in enriching human life. Established by Congress in 1820, the U.S. Botanic Garden is one of the oldest botanic gardens in North America. The Garden has been administered through the Architect of the Capitol since 1934. It is recognized as a museum and accredited by the American Alliance of Museums.

The U.S. Botanic Garden **Conservatory** is located on the National Mall at the intersection of Maryland Avenue and First Street SW, adjacent to the U.S. Capitol. The address is 100 Maryland Avenue SW, Washington, DC 20001.

The **Conservatory** houses permanent collections of plants from subtropical, tropical, Mediterranean and arid regions and showcases orchids, medicinal, economic, endangered and Jurassic plants. From late May to mid-October, the Conservatory terrace and the East Gallery feature thematic displays.

The **National Garden** is adjacent to the Conservatory. It features the Regional Garden, Rose Garden, First Ladies Water Garden, Butterfly Garden and Amphitheater.

**Bartholdi Park** is across Independence Avenue from the Conservatory. Here visitors will find a tapestry of theme gardens surrounding the historic Bartholdi Fountain. The gardens showcase interesting plants and designs at a scale suitable for the home landscape. Bartholdi Park is open dawn to dusk daily.

**Parking** is not available at the U.S. Botanic Garden on weekdays. It is accessible by **public transportation**. The Federal Center SW Station on the Orange, Blue and Silver Lines of Metrorail is at Third and D Streets SW, four blocks from the USBG. Metrobuses 32, 34 and 36 stop at Independence Avenue and First Street SW, between the Conservatory and Bartholdi Park. The DC Circulator Bus (National Mall route) stops across the street from the Conservatory on 3<sup>rd</sup> Street.

Free 45-minute highlight **tours** of the U.S. Botanic Garden Conservatory may be available on the day of your visit. Please check at the Visitor Information Desk upon your arrival. Groups of 10 to 25 adults may reserve a free 45-minute guided tour of the Conservatory Monday through Friday by calling (202) 226-2055 at least four weeks in advance.

The USBG strives to make its facilities and programs **accessible** to all visitors to ensure an enjoyable garden visit. Wheelchairs, Visitor Guides in braille and large print formats, sign language interpretation and hearing-aid compatible assistive listening devices for tours are all available upon request.

#### Visit our website at www.usbg.gov

#### For More Information

General Information & Accessibility at the USBG: 202-225-8333

Register for Programs: 202-225-1116 Request Tours: 202-226-2055 Plant Hotline: 202-226-4785

Volunteer Opportunities: 202-226-1047

2 Calendar of Events

# At a Glance

# Programs are listed by starting date.

| Starting<br>Date | Time       | Title  | Page |  |  |  |
|------------------|------------|--|------|--|--|--|
| September        |            |  |      |  |  |  |
| 1                | 2:00 p.m.  | Tour: An Afternoon in the Garden                     | 14   |  |  |  |
| 2                | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
| 3                | 10:30 a.m. | Parent & Child Program: Snugglers                    | 15   |  |  |  |
| 4                | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
| 5                | 10:30 a.m. | Lecture: Pome Fruit: Apples, Pears & Quince          | 15   |  |  |  |
| 8                | 10:30 a.m. | Children's Program: Seedlings                        | 16   |  |  |  |
| 8                | 2:00 p.m.  | Tour: An Afternoon in the Garden                     | 14   |  |  |  |
| 9                | 10:30 a.m. | Children's Program: Sprouts                          | 16   |  |  |  |
| 9                | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
| 9                | 4:30 p.m.  | Teacher Training: How Plants Work                    | 17   |  |  |  |
| 10               | 10:30 a.m. | Parent & Child Program: Snugglers                    | 15   |  |  |  |
| 10               | 12:00 p.m. | Cooking Demonstration: Mediterranean Magic           | 17   |  |  |  |
| 10               | 12:45 p.m. | Cooking Demonstration: Mediterranean Magic           | 17   |  |  |  |
| 10               | 3:00 p.m.  | American Roots Music Concert: Jonny Grave            | 18   |  |  |  |
| 11               | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
| 12               | 9:00 a.m.  | Art Workshop: Botanical Drawing from the Ground Up   | 18   |  |  |  |
| 12               | 10:30 a.m. | Tour: Exploring Roots                                | 19   |  |  |  |
| 14               | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
| 15               | 12:00 p.m. | Tour: Medicinal & Poison Plants                      | 19   |  |  |  |
| 15               | 2:00 p.m.  | Tour: An Afternoon in the Garden                     | 14   |  |  |  |
| 16               | 12:00 p.m. | Cooking Demonstration: Mediterranean Magic           | 17   |  |  |  |
| 16               | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
| 16               | 12:45 p.m. | Cooking Demonstration: Mediterranean Magic           | 17   |  |  |  |
| 17               | 10:30 a.m. | Parent & Child Program: Snugglers                    | 15   |  |  |  |
| 18               | 12:00 p.m. | Lecture: Feeding Nine Billion                        | 20   |  |  |  |
| 18               | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
| 18               | 6:00 p.m.  | Special Event: Harvest Party                         | 21   |  |  |  |
| 19               | 10:30 a.m. | Lecture: Photography on the Road                     | 21   |  |  |  |
| 19               | 2:00 p.m.  | Lecture: The Fascinating World of Carnivorous Plants | 22   |  |  |  |
| 21               | 10:30 a.m. | Tour: Roots & Reflections: Exposed!                  | 23   |  |  |  |
| 21               | 12:00 p.m. | Lunchtime Tour of the Conservatory                   | 14   |  |  |  |
|                  |            |  |      |  |  |  |

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| Starting<br>Date | Time       | Title   | Page |
|------------------|------------|---|------|
| 22               | 2:00 p.m.  | Tour: An Afternoon in the Garden                        | 14   |
| 23               | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 14   |
| 25               | 12:00 p.m. | Lecture: Farming's Perennial Future and Beyond          | 23   |
| 25               | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 14   |
| 25               | 3:00 p.m.  | American Roots Music Concert: South Rail Band           | 24   |
| 25               | 6:30 p.m.  | Special Event: Botany at the Bar                        | 24   |
| 26               | 10:00 a.m. | Festival: Celebrate Junior Botanists!                   | 25   |
| 28               | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 14   |
| 29               | 12:00 p.m. | Tour: Exploring Roots                                   | 19   |
| 29               | 1:30 p.m.  | Workshop: Connecting Generations                        | 25   |
| 29               | 2:00 p.m.  | Tour: An Afternoon in the Garden                        | 14   |
| 30               | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 14   |
| 30               | 2:00 p.m.  | Tour: The Art & History of the USBG                     | 26   |
| 30               | 4:30 p.m.  | Teacher Training: How Plants Work                       | 26   |
| October          |            |   |      |
| 1                | 10:30 a.m. | Parent & Child Program: Snugglers                       | 27   |
| 2                | 12:00 p.m. | Lecture: Grocery Store Botany                           | 28   |
| 2                | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 27   |
| 2                | 7:00 p.m.  | Children's Program: Night Adventure                     | 28   |
| 3                | 1:30 p.m.  | Workshop: Connecting Generations                        | 25   |
| 3                | 7:00 p.m.  | Children's Program: Night Adventure                     | 28   |
| 5                | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 27   |
| 6                | 10:30 a.m. | Children's Program: Seedlings                           | 29   |
| 6                | 2:00 p.m.  | Tour: An Afternoon in the Garden                        | 29   |
| 7                | 10:30 a.m. | Children's Program: Sprouts                             | 29   |
| 7                | 10:30 a.m. | Tour: Explore with the Executive Director               | 30   |
| 7                | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 27   |
| 8                | 10:30 a.m. | Parent & Child Program: Snugglers                       | 27   |
| 8                | 12:00 p.m. | Cooking Demonstration: Fifty Shades of Grain            | 30   |
| 8                | 12:45 p.m. | Cooking Demonstration: Fifty Shades of Grain            | 30   |
| 9                | 12:00 p.m. | Lecture: Formalizing Nature                             | 31   |
| 9                | 12:00 p.m. | Lunchtime Tour of the Conservatory                      | 27   |
| 10               | 10:30 a.m. | Lecture: The Botany, History & Future of Chrysanthemums | 31   |
| 10               | 2:00 p.m.  | Special Event: The Story of Chocolate                   | 32   |
| 11               | 1:30 p.m.  | Lecture: Following in Bartrams' Footsteps               | 32   |
| 12               | 10:30 a.m. | Lecture: The History of Spices                          | 33   |

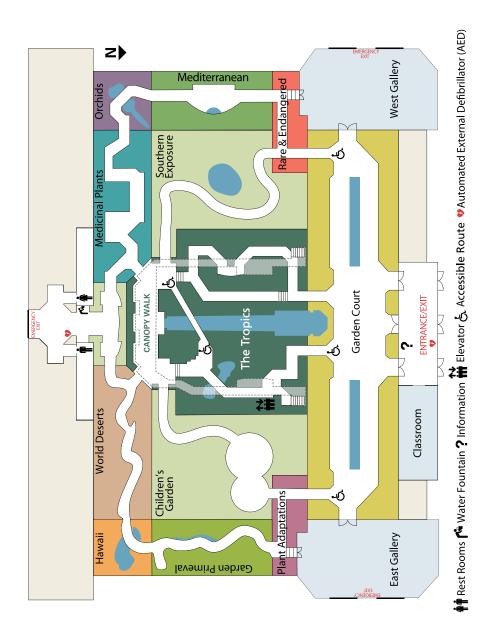
| Starting<br>Date | Time       | Title  | Page |
|------------------|------------|--|------|
| 12               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 13               | 12:00 p.m. | Tour: Medicinal & Poison Plants                          | 33   |
| 13               | 2:00 p.m.  | Tour: An Afternoon in the Garden                         | 29   |
| 14               | 9:00 a.m.  | Tour: World Deserts                                      | 34   |
| 14               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 14               | 2:00 p.m.  | Tour: The Art & History of the USBG                      | 34   |
| 15               | 10:30 a.m. | Parent & Child Program: Snugglers                        | 27   |
| 15               | 3:00 p.m.  | American Roots Music Concert: The Backroads Band         | 35   |
| 16               | 12:00 p.m. | Lecture: Beyond Herbal Plants                            | 35   |
| 16               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 17               | 9:00 a.m.  | Workshop: Digital Photography as Art                     | 36   |
| 19               | 10:30 a.m. | Tour: Roots & Reflections: Pantry Promises               | 36   |
| 19               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 20               | 2:00 p.m.  | Tour: An Afternoon in the Garden                         | 29   |
| 21               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 22               | 10:30 a.m. | Parent & Child Program: Snugglers                        | 27   |
| 22               | 3:00 p.m.  | American Roots Music Concert: Phil Wiggins "House Party" | 37   |
| 23               | 12:00 p.m. | Lecture: Digging In: Soils & Landscape Design            | 37   |
| 23               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 23               | 6:30 p.m.  | Special Event: The Science of Taste                      | 38   |
| 24               | 10:30 a.m. | Lecture: Creating a Forest Garden                        | 38   |
| 24               | 2:00 p.m.  | Lecture: Natural Landscape Design                        | 39   |
| 26               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 27               | 2:00 p.m.  | Tour: An Afternoon in the Garden                         | 29   |
| 28               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 29               | 10:30 a.m. | Parent & Child Program: Snugglers                        | 27   |
| 29               | 12:00 p.m. | Cooking Demonstration: Fifty Shades of Grain             | 30   |
| 29               | 12:45 p.m. | Cooking Demonstration: Fifty Shades of Grain             | 30   |
| 30               | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 27   |
| 30               | 12:00 p.m. | Special Event: Sweets from the Garden                    | 39   |
| 31               | 10:00 a.m. | Children's Program: Bat Hunt!                            | 40   |
| Novemb           | er         |  |      |
| 2                | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 40   |
| 3                | 12:00 p.m. | Tour: Medicinal & Poison Plants                          | 41   |
| 3                | 2:00 p.m.  | Tour: An Afternoon in the Garden                         | 41   |
| 4                | 12:00 p.m. | Lunchtime Tour of the Conservatory                       | 40   |

| Startin<br>Date | g<br>Time  | Title                                       | Page |
|-----------------|------------|---|------|
| 6               | 12:00 p.m. | Lunchtime Tour of the Conservatory          | 40   |
| 9               | 12:00 p.m. | Lunchtime Tour of the Conservatory          | 40   |
| 10              | 2:00 p.m.  | Tour: An Afternoon in the Garden            | 41   |
| 11              | 10:00 a.m. | Children's Program: Sprouts Reunion!        | 41   |
| 14              | 10:00 a.m. | Tour: Fall Tree Tour of the Capitol Grounds | 42   |
| Early J         | anuary     |   |      |
| 5               | 10:30 a.m. | Children's Program: Seedlings               | 43   |
| 6               | 10:30 a.m. | Children's Program: Sprouts                 | 43   |



# U.S. Botanic Garden





# **Exhibits**

#### **EXPOSED: THE SECRET LIFE OF ROOTS**

Conservatory East Gallery Through October 13

Plant roots are vital components of the earth's ecosystem. They are necessary for all plant growth, including the production of food and nutrients for humans and many other organisms. However, as root systems are out of sight, their beauty and importance often go unnoticed. Exposed: The Secret Life of Roots showcases the presence and importance of roots through visually stunning root representations using the work of agricultural ecologist Dr. Jerry Glover, sculptor Steve Tobin and photographer Jim Richardson.



# Illustrating Hidden Treasures: Botanical Art by Wendy Hollender

Conservatory West Gallery Through October 25

Come explore the belowground structures of plants through the botanical art of Wendy Hollender. On display in the West Gallery are several pieces by this celebrated artist who owns her own farm in the Catskills where she lives, farms, and draws.

#### Season's Greenings

Conservatory

November 26, 2015 through January 3, 2016



Daucus carota Illustration by Wendy Hollender

Holiday cheer abounds at the U.S. Botanic Garden! Despite the cold winter outside, the Conservatory boasts a tropical paradise, one of the largest indoor decorated trees in Washington, D.C. and a showcase of poinsettia and their plant cousins. It wouldn't be the winter holiday season without the fantasy train display in the East Gallery, which chugs along a track through imaginative structures created with plant materials. Explore our Pollination Station, visiting oversized flowers with bees, butterflies and bats in this year's scenic wonderland. Many of the capital's landmark buildings, all made from natural materials, will be on display in the Garden Court. Come in from the cold and enjoy the sights, scents and sounds of *Season's Greenings*.



# New Programs – Live Theater

The Kennedy Center and the United States Botanic Garden are collaborating for the first time on two unique and inventive world premiere productions to be performed at the USBG! A part of the 2015-2016 Kennedy Center Theater for Young Audiences season, please see below for specific performance information:

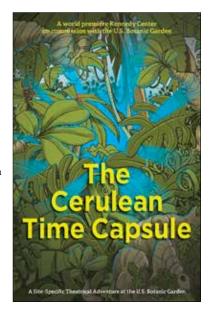
A Site-Specific Theatrical Adventure at the U.S. Botanic Garden

#### THE CERULEAN TIME CAPSULE

A world premiere Kennedy Center cocommission with the U.S. Botanic Garden

Created by Jonathan Shmidt Chapman and Drew Petersen from Trusty Sidekick Theater Company Directed by Drew Petersen

Meet Benjamin Peale, a botanist who claims to be a time traveler from the year 2041. He needs your help to stop a critical discovery from happening in the U.S. Botanic Garden—one that will bring catastrophe and destruction to the world as we know it! Help him find the mythic "Cerulean Time Capsule" before it's too late. Be alert. Be vigilant. Time is of the essence if you want to change the course of the space-time continuum in the name of botanical security. Don't miss this immersive and interactive theatrical event that whisks small groups all around the Conservatory on



the botanical adventure of a lifetime. Your future self is depending on you! Please note: Due to our narrow paths and the nature of this program, performance group size is limited to 12 participants per time slot.

Dates: Weekends, September 12 through October 25, 2015

Times: A variety of times will be offered. Please visit www.usbg.gov/theater for performance times.

**Location:** Conservatory

Please note: FREE on-site registration is available the day of the performance. Time slot availability will be on a first-come, first-served basis for the day of the event. If you would like to reserve a specific date and time slot in advance, you may do so for a nominal fee. Cost is \$1 for Friends and \$2 for Non-members. Visit www.usbg.gov/theater to reserve a specific date and time slot.

A world premiere Kennedy Center musical co-commissioned with the U.S. Botanic Garden

#### FLOWERS STINK

Words and music by Debra Buonaccorsi and Stephen McWilliams Directed by Gregg Henry

When you live in a big city, a.k.a. "the concrete jungle," sometimes it's hard to appreciate the great outdoors. That's definitely the case with one middle school girl, who's struggling with writing a nature-themed poem for school. Giving up, she tweets: "#natureisboring #flowersstink." Suddenly, two zany and loveable plants magically come to life in her room, encouraging her to open her eyes, ears, and mind to the beauty all around her. Pointing to her own family history, the girl's newfound friends transport her imagination to the flora and fauna of a desert, a volcano, and a rain forest to help unleash her creativity. Mixing plenty of singing and dancing with folk, bluegrass, blues, and gospel, this colorful world premiere musical, by the Helen Hayes Award-winning creators of Dizzy Miss Lizzies Roadside Revue, shows that, if you look closely enough, you can find the best of nature in the most



unlikely places. Please note: Limited seating will be available on a first-come, first-served basis. This production occurs outdoors. We recommend bringing water and wearing sunscreen.

Dates: Saturday, September 26, October 3, 10, 17, 24 Times: Performances will be held at 11 a.m. and 1 p.m.

Location: National Garden Amphitheater (Rain Location: Conservatory West Gallery)

FREE: No pre-registration required

# **Programs**

Programs are listed by start date.

#### Tour

#### LUNCHTIME TOUR OF THE CONSERVATORY

USBG Volunteers

Want to visit a jungle, desert, and tropical paradise? Want to travel back to the U.S. Exploring Expedition and the Jurassic period? Take a tour with a knowledgeable guide who will connect the exotic plant world to everyday life. You might see bananas, cacao and coffee ripening on the tree or learn about the next big breakthrough in medical plant research.

Dates: Mondays, September 14, 21, 28

Dates: Wednesdays, September 2, 9, 16, 23, 30

Dates: Fridays, September 4, 11, 18, 25

Time: 12 p.m. to 1 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required

# Tour An Afternoon in THE GARDEN

USBG Volunteers

What do manila folders, Chanel No. 5, vanilla and fossil fuels have in common? They all come from plants on permanent display in the USBG Conservatory. Take a tour with a knowledgeable guide who will connect the exotic plant world to everyday life. You might see bananas, cacao and coffee ripening on the tree or learn about the next big breakthrough in medicinal plant research.



Dates: Tuesdays, September 1, 8, 15, 22, 29

Time: 2 p.m. to 3 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required

# Parent & Child Program

#### Snugglers

USBG Volunteer

Do you have a tiny treasure in a snuggly? Looking for ways to get out of the house and learn? Join us each Thursday for a 45-minute guided tour of the Conservatory. Each week will be a different exploration. This program is designed for parents and care providers who have a tiny one in a snuggly. Please note: Due to our narrow paths and the nature of this program, we cannot support strollers or older siblings.

Date (choose any or all of the following): Thursday, September 3, 10, 17

Time: 10:30 a.m. to 11:30 a.m. Location: Conservatory Garden Court

FREE: Pre-registration required: Visit www.usbg.gov

#### Lecture

# Pome Fruit: Apples, Pears & Quince – Botany, History and Production

Todd Brethauer, USBG Science Education Volunteer

From their glorious spring blossoms that light up our landscapes to the tasty fruit harvested in late summer through late autumn, pome fruits play an important part of our horticultural and nutritional palates. Spend an hour learning about the origin of the

apple and where you can find a forest of its wild ancestors. Find out how modern genome sequencing techniques are clarifying the evolutionary history of these fruit and providing tools for breeders confronting the insect pests and diseases that affect the trees.

Date: Saturday, September 5 Time: 10:30 a.m. to 12 p.m. **Location:** Conservatory

Classroom

FREE: Pre-registration required: Visit www.usbg.gov



Malaus domestica Photo by Todd Brethauer

# Children's Program SEEDLINGS

Lee Coykendall, USBG Children's Education Specialist

Come learn just how amazing plants really are during our Seedlings class (ages 6-10). Each week will be a mix of hands-on investigations, planting projects and sciencebased activities. Please note: Students must be at least 6 years of age and



accompanied by an adult. Seedlings is designed for a more advanced level of plant science education. For the benefit of all participants, we request that only children ages 6 and up attend and share in class activities.

Dates: Tuesdays, September 8, 15, 22, 29

Time: 10:30 a.m. to 12 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov\*

\*Please note: Registration opens on Wednesday, August 5 at 10 a.m.

# Children's Program SPROUTS

Lee Coykendall, USBG Children's Education Specialist

Bring your preschooler (ages 3-5) to the U.S. Botanic Garden for plant-related fun. Each Wednesday session will have varied activities that may include a story, art activity or walk in the garden. Please note: Children must be accompanied by an adult. Participating children must be at least 3 years of age.

Dates: Wednesdays, September 9,

16, 23, 30

Time: 10:30 a.m. to 11:30 a.m. Location: Conservatory Classroom FREE: Pre-registration required:

Visit www.usbg.gov\* \*Please note: Registration opens on Wednesday, August 5 at 10 a.m.



# Teacher Training How Plants Work for Elementary School Teachers

Lee Coykendall, USBG Children's Program Specialist

Never have time to get to the U.S. Botanic Garden? Join Lee Coykendall for a behind-the-scenes workshop and learn how to use the Garden as an extension of your classroom. This workshop is designed for elementary school teachers.

**Date:** Wednesday, September 9 **Time:** 4:30 p.m. to 7 p.m.

Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov



# Cooking Demonstration Mediterranean Magic

Adrienne Cook, Gardening and Cooking Writer and Danielle Cook, MS, Nutritionist and Cooking Instructor

Olives, lemon, garlic, oregano, cinnamon, lentils, and cucumber: delve into the flavors of the Mediterranean with the Cook Sisters as they demo two recipes that feature a medley of ingredients from one of the most flavorful regions of the world. **Please note:** The 12:45 p.m. program is a repeat of the 12 p.m. program.



# Concert Series AMERICAN ROOTS MUSIC

Jonny Grave, Blues

Come celebrate Exposed: The Secret Life of Roots with this concert series featuring American roots music. Jonny Grave is a guitarist, songwriter, singer, bandleader, busker, teacher, musical historian and Bluesman from Washington, D.C. The distinct sound that Jonny Grave's music conjures is a resurrection of sorts—the music of R. L. Burnside, Mississippi



Photo by Paul Mangano

Fred McDowell, Robert Johnson and Bukka White all find a way into Grave's playing style. His repertoire of sound is made up of new arrangements of older Blues tunes and deeply rooted solid originals. Please note: Limited seating available on a first-come, first-served basis.

Date: Thursday, September 10

Time: 3 p.m. to 5 p.m.

Location: Conservatory Garden Court FREE: No pre-registration required

# Art Workshop

## BOTANICAL DRAWING FROM THE GROUND UP: ROOTS

Wendy Hollender, Botanical Artist, Author and Instructor

Drawing roots is an important component of botanical drawing. Roots may seem complicated, but when you analyze their characteristics, drawing them becomes a simpler step-by-step process. Students will draw a taproot and the finer fibrous roots to draw a root as it is growing in the ground. Working in colored pencil and water color pencil, focus will be on creating three dimensional form in color as well as the importance in understanding overlapping elements to make your drawings have depth. Soil backgrounds will be rendered if time allows. Please note: A materials list can be found with the online listing. Please bring a lunch.



Daucus carota Illustration by Wendy Hollender

Date: Saturday, September 12 through Sunday, September 13

Time: 9 a.m. to 4:30 p.m.

Location: Conservatory Classroom

Friends: \$150 Non-members: \$175

Pre-registration required: Visit www.usbg.gov

#### Tour

#### **EXPLORING ROOTS**

Dr. Susan Pell, USBG Science and Public Programs Manager

Come on a botanical journey through Exposed: The Secret Life of Roots with Science and Public Programs Manager Susan Pell. Explore the indoor and outdoor components of the exhibit while learning about the botany of roots and important role of root crops around the world. Some live plantings on the Conservatory Terrace will be excavated



for an under-the-soil view and we'll talk about the processes involved in growing the dried plants on display in the East Gallery. Please note: This will be a walking tour in the National Garden and the Conservatory Terrace and East Gallery. Only indoor locations will be featured if it rains. Program on September 29 is a repeat of the program on September 12.

Date: Saturday, September 12 Time: 10:30 a.m. to 11:30 a.m.

Location: Tour will meet by the entrance to the Conservatory on the Terrace

FREE: Pre-registration required: Visit www.usbg.gov

Date: Tuesday, September 29 Time: 12 p.m. to 1 p.m.

Location: Tour will meet by the entrance to the Conservatory on the Terrace

FREE: Pre-registration required: Visit www.usbg.gov

#### Tour

#### Medicinal and Poison Plants at the USBG

Beth Burrous, Biochemist and USBG Volunteer

Many important medicines are derived from plants, but too much of a good thing can be dangerous. During a walking tour of the Conservatory, Beth Burrous will feature poisonous and medicinal plants growing at the USBG. She will talk about famous,



interesting and sometimes fatal cases of poisoning by plants. You will also see and learn about plants used to make lifesaving medicines.

Date: Tuesday, September 15

Time: 12 p.m. to 1 p.m.

Location: Tour meets in the Conservatory

Garden Court

FREE: No pre-registration required



Photo by Jim Richardson

Lecture

# FEEDING NINE BILLION: PROBLEMS AND SOLUTIONS FOR WORLD AGRICULTURE

Dr. Jerry Glover, National Geographic Explorer and Agricultural Ecologist, and Jim Richardson, National Geographic Photographer

Feeding the world's growing population will be one of humanity's greatest challenges in the coming century. Dr. Jerry Glover, agricultural ecologist, and Jim Richardson, National Geographic photographer, will draw on years of experience in the realms of photography, food and agriculture to serve up a vast visual journey: the Neolithic dawn of agriculture, today's world farmers working in relative anonymity, and the challenges of feeding an ever-more hungry planet through 2050.

Date: Friday, September 18 Time: 12 p.m. to 1 p.m.

Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov

# Special Event HARVEST PARTY

Sponsored by the National Fund for the U.S. Botanic Garden

Celebrate the end of the local growing season at the Harvest Party! The event features Washington-area guest chefs presenting cooking demonstrations and a delicious buffet full of garden fresh ideas, in addition to cocktails and microbrews. Please join us for this unique and exciting event at the U.S. Botanic Garden.

Date: Friday, September 18 Time: 6 p.m. to 8 p.m.

Location: National Garden (Rain

Location: Conservatory)

Friends: \$100 Non-members: \$125

Pre-registration required: Visit www.nfusbg.org/events. No registrations will be accepted at the door. For additional information contact the National Fund Administrator at (202) 225-1281.



# Photography on the Road: Tools & Techniques

Jim Richardson, National Geographic Photographer

Jim Richardson has spent his lifetime looking for pictures. Join him as he shares lessons learned from a wide ranging career, everything from documentary photography of people and dramatic landscapes in remote locales to technical photography of science stories. Photographs are meant to communicate; Jim will speak directly about



Photo by Jim Richardson

how to make exciting pictures that tell compelling stories — and reach viewers with compelling emotions. For all levels of picture takers and lovers of pictures.

Date: Saturday, September 19 Time: 10:30 a.m. to 12:30 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov

#### Lecture

#### THE FASCINATING WORLD OF CARNIVOROUS PLANTS

Todd Brethauer, USBG Science Education Volunteer

Few plants fascinate young and old alike more than carnivorous plants. The adaptation and ability of these 700+ plant species allows them to capture and digest insects and other small animals, which enables them to grow in nutrient poor soils. Learn about the evolution, history, ecology and physiology of the carnivorous plants of the world and how modern science is being applied to better understand them. Get hints on how to keep your carnivorous plants healthy and happy at home. Discover which carnivorous plant was a favorite of President Thomas Jefferson and which carnivorous plant was used by the surgeons in General George Washington's Revolutionary War Army.

Date: Saturday, September 19 Time: 2 p.m. to 3:30 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov



Photo by Todd Brethauer



Nepenthes leesi Photo by Todd Brethauer

#### Tour

#### ROOTS & REFLECTIONS: EXPOSED!

Libby Rhoads, USBG Education Program Specialist, and Alex Torres, National Fund Education and Outreach Manager

Why are roots important? Why do they matter to both plants and people? Using Exposed: The Secret Life of Roots exhibition as a jumping off point, reminisce and relax during this tour designed specifically for individuals with dementia and their care providers.

Date: Monday, September 21 Time: 10:30 a.m. to 12 p.m.

Location: Tour will meet in the Conservatory Classroom FREE: Pre-registration required: Visit www.usbg.gov



## Lecture

## FARMING'S PERENNIAL FUTURE AND BEYOND

Dr. Jerry Glover, National Geographic Explorer and Agricultural Ecologist

Farmers and scientists around the world use and develop innovative strategies to harness soil, water and sunlight to produce food for our growing population. Dr. Jerry Glover, National Geographic Explorer and agricultural ecologist, describes the future trajectory of food production from



Annual wheat (on left in each month panel) and perennial wheatgrass Photo by Jim Richardson

its current, largely unsustainable state to more-sustainable, perennial-based cropping strategies and on to emerging strategies for producing delicious, nutritious food not harvested from farm fields.

Date: Friday, September 25 Time: 12 p.m. to 1 p.m.

Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov

## Concert Series AMERICAN ROOTS MUSIC

South Rail Band, Americana/Roots

Come celebrate Exposed: The Secret Life of Roots with this concert series featuring American roots music. Robust harmonies backed by solid songwriting and musicianship defines South Rail Band's original music, steeped in a fusion of authentic Americana and Roots, In addition to local shows.



the band has toured several times through the Southeast to support their 2013 self-titled EP, which was ranked as D.C.'s 6th Best Album of the Year in any genre by Brightest Young Things. Please note: Limited seating available on a first-come, first-served basis.

Date: Friday, September 25 Time: 3 p.m. to 5 p.m.

Location: Conservatory Garden Court FREE: No pre-registration required

# Special Event BOTANY AT THE BAR

Rachel Meyer, PhD, Evolutionary Botanist, AAAS Science and Technology Policy Fellow, co-founder of Shoots and Roots Bitters

Ever thought about the roughly 50 plant species in the coupe of your Manhattan? Or how



many kinds of agave there are? In this workshop, we take a scientific journey into three cocktails and five bitters, discussing ethnobotany, chemistry, scientific traditions and freshest innovations that help us value the world's 40,000 eaten and imbibed plants. Please note: This program is intended for those 21 years of age and older. Small bites will be served to accompany the tasting journey.

Date: Friday, September 25 Time: 6:30 p.m. to 8:30 p.m.

Location: Conservatory Garden Court

Friends: \$25

Non-members: \$30

Pre-registration required: Visit www.usbg.gov

#### **Festival**

#### CELEBRATE JUNIOR BOTANISTS!

USBG Staff & Volunteers

Come help us celebrate the wonders of being a Junior Botanist! Adventure abounds at the U.S. Botanic Garden as you discover all the talents needed to become a Junior Botanist. Between hands-on activities, engaging discussions with USBG staff and volunteers and tasty cooking demonstrations, be sure to ponder plants with root expert Dr. Jerry Glover. Then checkout a backpack and try to become an actual Junior Botanist! Please note: This program will occur rain or shine.

Date: Saturday, September 26 Time: 10 a.m. to 3 p.m.

Location: Conservatory Terrace (Rain Location: Garden Court)

FREE: No pre-registration required



## Workshop

#### Connecting Generations

Lee Coykendall, USBG Children's Education Specialist and Maura Nelson, USBG Volunteer Coordinator

This is a workshop to empower "grandparents" on how to use the Botanic Garden to excite the younger generation about the magical world of plants. We will explore ways to get excited before the Garden visit, what are the hooks and books to prepare for the Garden visit. Next, participants will learn a story for each room of the Conservatory and leave a plant storyteller. This workshop concludes with the creation of a toolkit filled with fun plant activities to continue the adventures at home. Please note: Adults only please; plan to bring the kids later! Be advised, the program on Saturday, October 3 is a repeat of the program on Tuesday, September 29.

Date: Tuesday, September 29 Time: 1:30 p.m. to 3:30 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov

Date: Saturday, October 3 Time: 1:30 p.m. to 3:30 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov





Photo by Architect of the Capitol

# Tour THE ART AND HISTORY OF THE USBG Susan Klusman, USBG Volunteer

Ever wonder why the U.S. Botanic Garden Conservatory is located on its present site? What the architectural style of the building is? How Bartholdi's Fountain became part of the USBG? Where many of the first plants in the Conservatory originated? This walking tour will explore how historical currents, architecture, sculpture, and landscape architecture came together to create this grand building. Please note: The program is canceled if it rains.

Date: Wednesday, September 30 Time: 2 p.m. to 3 p.m.

Location: Tour meets on the Terrace by the entrance to the USBG Conservatory

FREE: No pre-registration required

# **Teacher Training** How Plants Work for Middle and High School Teachers

Lee Coykendall, USBG Children's Program Specialist

Never have time to get to the U.S. Botanic Garden? Join Lee Coykendall for a behindthe-scenes workshop and learn how to use the Garden as an extension of your classroom. This workshop is designed for middle and high school teachers.

Date: Wednesday, September 30 Time: 4:30 p.m. to 7 p.m.

Location: Conservatory Classroom FREE: Pre-registration required:

Visit www.usbg.gov



# Parent & Child Program SNUGGLERS

USBG Volunteer

Do you have a tiny treasure in a snuggly? Looking for ways to get out of the house and learn? Join us each Thursday for a 45-minute guided tour of the Conservatory. Each week will be a different exploration. This program is designed for parents and care providers who have a tiny one in a

snuggly. **Please note:** Due to our narrow paths and the nature of this program, we cannot support strollers or older siblings.

Date (choose any or all of the following): Thursday, October 1, 8, 15, 22, 29

Time: 10:30 a.m. to 11:30 a.m. Location: Conservatory Garden Court

FREE: Pre-registration required: Visit www.usbg.gov



USBG Volunteers

Want to visit a jungle, desert, and tropical paradise? Want to travel back to the U.S. Exploring Expedition and the Jurassic period? Take a tour with a knowledgeable guide who will connect the exotic plant world to everyday life. You might see bananas, cacao and coffee ripening on the tree or learn about the next big breakthrough in medical plant research.

**Dates:** Mondays, October 5, 12, 19, 26 **Dates:** Wednesdays, October 7, 14, 21, 28 **Dates:** Fridays, October 2, 9, 16, 23, 30

Time: 12 p.m. to 1 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required





#### Lecture

#### **GROCERY STORE BOTANY**

Susan Pell, USBG Science and Public Programs Manager

You say potato, I say tuber! In this interactive lecture, we will examine root vegetables harvested from the Conservatory Terrace raised beds, as well as those purchased from the grocery store. Humans eat a diversity of underground plant parts, not all of which are roots. Learn about the botany, origins and



cultivation history of these important crops as we examine taro, radishes, carrots, beets, yucca, potatoes, yams, parsnips and many more.

Date: Friday, October 2 Time: 12 p.m. to 1 p.m.

Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov

# Children's Program

## NIGHT ADVENTURE AT THE USBG

Lee Coykendall, USBG Children's Education Specialist

Ever wonder what it's like to be at the U.S. Botanic Garden late at night after the public and gardeners have gone home? A night adventure awaits you as you venture out on a flashlight tour of the Jungle, explore night-blooming flowers and night pollinators, experience the cool of the night desert and participate in several hands-on plant science experiments. Please note: Participants must be between the ages of 9 and 12 and be accompanied by an adult. No adults may enroll without registered children. Parents must remain on site during the program. The program on Saturday is a repeat of the program on Friday.

Date: Friday, October 2 Time: 7 p.m. to 9:30 p.m. Location: Conservatory

FREE: Pre-registration required:

Visit www.usbg.gov

Date: Saturday, October 3 Time: 7 p.m. to 9:30 p.m. Location: Conservatory

FREE: Pre-registration required:

Visit www.usbg.gov



# Children's Program SEEDLINGS

Lee Coykendall, USBG Children's Education Specialist

Come learn just how amazing plants really are during our Seedlings class (ages 6-10). Each week will be a mix of hands-on investigations, planting projects and sciencebased activities. Please note: Students must be at least 6 years of age and accompanied



by an adult. Seedlings is designed for a more advanced level of plant science education. For the benefit of all participants, we request that only children ages 6 and up attend and share in class activities.

Dates: Tuesdays, October 6, 13, 20, 27

Time: 10:30 a.m. to 12 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov\*

\*Please note: Registration opens on Wednesday, September 2 at 10 a.m.

#### Tour

#### An Afternoon in the Garden

USBG Volunteers

What do manila folders, Chanel No. 5, vanilla and fossil fuels have in common? They all come from plants on permanent display in the USBG Conservatory. Take a tour with a knowledgeable guide who will connect the exotic plant world to everyday life. You might see bananas, cacao and coffee ripening on the tree or learn about the next big breakthrough in medicinal plant research.

Dates: Tuesdays, October 6, 13, 20, 27

Time: 2 p.m. to 3 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required

# Children's Program

#### SPROUTS

Lee Coykendall, USBG Children's Education Specialist

Bring your preschooler (ages 3-5) to the U.S. Botanic Garden for plant-related fun. Each Wednesday session will have varied activities that may include a story, art activity or walk in the garden. Please note: Children must be accompanied by an adult. Participating children must be at least 3 years of age.

Dates: Wednesdays, October 7, 14, 21, 28

Time: 10:30 a.m. to 11:30 a.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov\*

\*Please note: Registration opens on Wednesday, September 2 at 10 a.m.

#### Tour

#### **Explore With the Executive Director**

Dr. Ari Novy, USBG Executive Director

Join USBG Executive Director Dr. Ari Novy on an expedition through the collections of the U.S. Botanic Garden. Dr. Novy will share stories of his favorite plants, the history of the institution and the many unique treasures contained within and outside the Garden's walls during the fall season.

Date: Wednesday, October 7 Time: 10:30 a.m. to 11:30 a.m. Location: Tour will meet in the Conservatory Garden Court

FREE: Pre-registration required: Visit www.usbg.gov



# Cooking Demonstration FIFTY SHADES OF GRAIN

Adrienne Cook, Gardening and Cooking Writer and Danielle Cook, MS, Nutritionist and Cooking Instructor

What other nutrient-rich and deeply satisfying grains are out there and how do you cook them? Two recipes from the Cook Sisters will feature the panoply of grains now easily accessible at supermarkets and on line. Delicious, comforting dishes for fall dining and beyond. **Please note:** The 12:45 p.m. program is a repeat of the 12 p.m. program.

Dates: Thursdays, October 8 and 29

Time: 12 p.m. to 12:45 p.m. and 12:45 to 1:30 p.m.

Location: Conservatory Garden Court FREE: No pre-registration required



# Lecture FORMALIZING NATURE

Steve Tobin, artist

Steve Tobin's monumental sculptures serve to reanimate and recontextualize their surroundings and are often representational of the natural environment. During this presentation, he will share images from his exhibitions in museums and gardens around the world and answer questions from the audience.

Date: Friday, October 9 Time: 12 p.m. to 1 p.m.

Location: Conservatory Classroom FREE: Pre-registration required



Cathedral Root by Steve Tobin

# Lecture

# THE BOTANY, HISTORY AND FUTURE OF CHRYSANTHEMUMS

Todd Brethauer, USBG Science Education Volunteer

Each fall chrysanthemums bring diverse colors and floral forms to our gardens and homes. Brought under cultivation in Asia thousands of years ago, they have important cultural, medicinal and culinary uses in Chinese and Japanese cultures in addition to their popular horticultural uses. In the 1800s, they became a passion for gardeners and breeders in Europe and the young United States. Come and learn which First Lady attended the national chrysanthemum show in Indianapolis so she could present the grand prize to the winning grower.



Lili Gallon Photo by Todd Brethauer

Learn how modern analytical and breeding methods are being applied around the world to improve the disease- and insect-resistance and to improve production methods of these "Starry Eyed Daughters of the Fall."

Date: Saturday, October 10 Time: 10:30 a.m. to 12 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov

## Special Event THE STORY OF CHOCOLATE

Adam Kavalier, Ph.D., Founder, Owner, Undone Chocolate

Did you know that chocolate comes from a fruit? Dr. Adam Kavalier, co-founder of Undone Chocolate, a D.C. based craft chocolate maker, will present the story of chocolate, describing where it comes from and how it is made. The story starts with the cocoa bean and explores the exciting journey that it takes to become a chocolate bar. Along the way there are several smells and flavors that will be shared, including a chocolate tasting from different regions around the world.

Date: Saturday, October 10 Time: 2 p.m. to 3:30 p.m.

Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov

#### Lecture

#### FOLLOWING IN THE BARTRAMS' FOOTSTEPS

Judy Thomas, certified botanical illustrator and instructor in Lewis Ginter Botanical Garden's Art in the Garden program

Join Judy Thomas, exhibitor in the acclaimed traveling exhibition Following in the Bartrams' Footsteps, as she talks about the inspiration she found in the life of John Bartram. Bartram was an 18th century Quaker botanist, plantsman and farmer who exchanged a lifetime of correspondence with leaders of European science, making many contributions about the New World. Judy will present a brief history of Bartram, describe how his life captured her imagination, and provide research she conducted for her exhibit piece and for an in-progress work of historical fiction involving Bartram's world in colonial Philadelphia.

Please note: This program is offered in conjunction with the Botanical Art Society of the National Capital Region. Only 20 seats will

be available for USBG visitors. Doors will open at 1:20 p.m.

Date: Sunday, October 11 Time: 1:30 p.m. to 2:30 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov



Image selected for the American Society of Botanical Artists (ASBA) exhibition, Following in the Bartrams' Footsteps. Photo by Judy Thomas

## Lecture THE HISTORY OF SPICES

Todd Brethauer, USBG Science Education Volunteer

The botany, geography, ecology and economics of spice production combined with human lust for spice consumption have conspired over the centuries to make fortunes for a few and launched the great voyages of discovery that changed the lives of many. Learn how pepper, allspice, cinnamon, cloves and nutmeg, once affordable only for the very rich, have become part of our daily lives. Todd Brethauer will cover the production, processing and history of spices with plants from the USBG collection.

Date: Monday, October 12 Time: 10:30 a.m. to 12 p.m. Location: Conservatory Classroom FREE: Pre-registration required:

Visit www.usbg.gov



Piper nigrum Photo by Todd Brethauer

#### Tour

#### MEDICINAL AND POISON PLANTS AT THE USBG

Beth Burrous, Biochemist and USBG Volunteer

Many important medicines are derived from plants, but too much of a good thing can be dangerous. During a walking tour of the Conservatory, Beth Burrous will feature poisonous and medicinal plants growing at the USBG. She will talk about famous, interesting and sometimes fatal cases of poisoning by plants. You will also see and learn about plants used to make life-saving medicines.



Date: Tuesday, October 13 Time: 12 p.m. to 1 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required

#### Tour WORLD DESERTS

Elliott Norman, USBG Gardener

Join USBG Gardener Elliott Norman as he takes you on a horticultural trip through vast deserts of the world, sharing secrets of the collection he helped establish more than 30 years ago. Please note: This program occurs before the building opens to the public. Doors will open to attendees approximately 15 minutes prior to program start time.



Date: Wednesday, October 14 Time: 9 a.m. to 10 a.m.

Location: Tour will meet in the Conservatory Garden Court FREE: Pre-registration is required: Visit www.usbg.gov



Photo by Architect of the Capitol

# Tour THE ART AND HISTORY OF THE USBG Susan Klusman, USBG Volunteer

Ever wonder why the U.S. Botanic Garden Conservatory is located on its present site? What the architectural style of the building is? How Bartholdi's Fountain became part of the USBG? Where many of the first plants in the Conservatory originated? This walking tour will explore how historical currents, architecture, sculpture and landscape architecture came together to create this grand building. Please note: The program is canceled if it rains.

Date: Wednesday, October 14 Time: 2 p.m. to 3 p.m.

Location: Tour meets on the Terrace by the entrance to the USBG Conservatory

FREE: No pre-registration required

## Concert Series AMERICAN ROOTS MUSIC

The Backroads Band, Honky Tonk Country

Come celebrate Exposed: The Secret Life of Roots with this concert series featuring American roots music. One of the Washington area's top honky tonk bands, The Backroads Band plays vintage country from the 1940s-1970s plus original roots songs written in that early country style. Winners of the 2013 Wammies for Best Country Vocalist,



Best Country Group, and Best Country Instrumentalists, The Backroads Band will have you up dancing a boot-scootin' two step or snuggling up close for a buckle-polishing slow tune. Please note: Limited seating available on a first-come, first-served basis.

Date: Thursday, October 15 Time: 3 p.m. to 5 p.m.

Location: Conservatory Garden Court FREE: No pre-registration required

# Lecture

# BEYOND HERBAL PLANTS: HOW MEDICINAL BOTANY Is Instrumental in Modern Medicine

Theresa Culley, Associate Professor, University of Cincinnati

When asked about medical botany, most people think of herbal remedies as an alternative medical treatment. However medical botany is also now at the forefront of many modern medical discoveries — from exciting new treatments for cancer and HIV to antibiotic resistance and malaria as well as veterinary medicine. In this presentation, we will discuss both the history of medical botany as well as the growing field of new discoveries that plants are providing for our world today.

Date: Friday, October 16 Time: 12 p.m. to 1 p.m.

Location: Conservatory Classroom FREE: Pre-registration required:

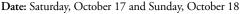
Visit www.usbg.gov



# Workshop DIGITAL PHOTOGRAPHY AS ART

Allen Rokach, photographer

Designed for all photographers who want to improve their images of flowers, this workshop will teach you to create truly extraordinary digital photographs using both your digital camera and your computer. Master photographer Allen Rokach will help you understand the intricacies of your digital camera to produce the best possible images concentrating on creating photographs built around color, shape, line, texture and mood. Then during review sessions explore ways to fine-tune and enhance your images in creative ways using both "Rokach's Effect" and today's amazing but simple aftercapture applications. Please note: This workshop will introduce a number of state-of-the-art apps (including smart phones & tablets), designed to create unique images of flowers. The workshop includes time to review and critique participants' images and select the best images for printing. Bring your laptop for review sessions. A materials list can be found with the online listing. Please bring a lunch.



Time: 9 a.m. to 5 p.m.

Location: Conservatory Classroom

Friends: \$165

Non-members: \$185

Pre-registration required: Visit www.usbg.gov





Photos by Allen Rokach

#### Tour

#### ROOTS & REFLECTIONS: PANTRY PROMISES

Libby Rhoads, USBG Education Program Specialist, and Alex Torres, National Fund Education and Outreach Manager

Have a hankering for hot chocolate? Can't survive without your morning cup of coffee? Come reminisce, relax and explore the connection between the pantry and garden during this tour designed specifically for individuals with dementia and their care providers.

Date: Monday, October 19 Time: 10:30 a.m. to 12 p.m.

Location: Tour will meet in the Conservatory Classroom FREE: Pre-registration required: Visit www.usbg.gov

#### Concert Series

## AMERICAN ROOTS MUSIC

Phil Wiggins "House Party", Acoustic Blues

Come celebrate Exposed: The Secret Life of Roots with this concert series featuring American roots music. Phil Wiggins, with expert finger style, Rick Franklin, on East Coast style guitar, and Marcus Moore, a fiery jazz violist steeped in the black string band tradition, combine to perform acoustic blues music that has been critically acclaimed and presented by the American Folklife Center. Please note: Limited seating available on a first-come, first-served basis.

Date: Thursday, October 22 Time: 3 p.m. to 5 p.m.

Location: Conservatory Garden Court FREE: No pre-registration required

## Lecture

## DIGGING IN: SOILS AND LANDSCAPE DESIGN

Dr. John C. Swallow, Principal, Pine & Swallow Environmental

Over the past two decades landscape design has evolved to address new challenges and opportunities. Cities look to greener streetscapes and to high-use public spaces to enhance quality of life. Evolution of horticultural soil design is integral to these advances. Join Dr. Swallow as he discusses the complexity of soil ecosystems with an emphasis on the biological, physical and chemical properties of soil and the features and benefits of manufactured soil blends for a wide variety of landscape applications including high-use lawns, planting beds, green roofs, rain gardens, wetlands and water features, and streetscape systems.

Date: Friday, October 23 Time: 12 p.m. to 1 p.m.

Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov



## Special Event

## THE SCIENCE OF TASTE

Rachel Meyer, PhD, Evolutionary Botanist, AAAS Science and Technology Policy Fellow, co-

founder of Shoots and Roots Bitters

Understanding how taste works and why humans perceive flavor so differently is a nascent scientific field, but one bursting with mindblowing breakthroughs about human history. Reinvigorate your redefined taste buds in this workshop that explores the science of global taste as well as the taste of science. Please note: Small bites will be served to accompany the tasting journey.



Date: Friday, October 23 Time: 6:30 p.m. to 8:30 p.m.

Location: Conservatory Garden Court

Friends: \$25 Non-members: \$30

Pre-registration required: Visit www.usbg.gov

#### Lecture

#### CREATING A FOREST GARDEN

Lincoln Smith, Founder, Forested

Learn how to create a forest garden: an agricultural system modeled on the forest. A forest garden provides a critical combination of benefits for people and the environment by cleaning water, building soil and providing a bounty of food and supplies. Come hear about what Lincoln has learned in several years of backyard forest gardening and 4 years developing a 10-acre research forest garden.

Date: Saturday, October 24 Time: 10:30 a.m. to 12 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov



## Lecture NATURAL LANDSCAPE DESIGN: STRATEGIES FOR THE REAL WORLD

Larry Weaner, Larry Weaner Landscape Associates

Natural landscape design is increasing in demand, whether in the small home landscape or at a larger scale. Join noted natural landscape design expert Larry Weaner as he explores concrete, practical techniques for gracefully integrating the art and science of natural landscapes on sites large and small. Meadow and woodland projects will be shown from inception to maturity, providing a behind-the-scenes

look at both the functional and aesthetic considerations involved in creating and maintaining compelling natural landscapes.

Date: Saturday, October 24 Time: 2 p.m. to 3:30 p.m. Location: Conservatory Classroom FREE: Pre-registration required: Visit www.usbg.gov

## **Special Event** SWEETS FROM THE GARDEN

Beth Burrous, Biochemist & USBG Volunteer

Have a sweet tooth? Beth will highlight plants from around the world that impart flavor to sweet foods. Explore and discuss the history and botany of plants like sugar cane, coconut palm, tamarind, ginger, allspice, cinnamon, agave, coffee and chocolate. Samples of unusual and familiar sweets will be provided.

Date: Friday, October 30 Time: 12 p.m. to 1:30 p.m. Location: Conservatory Classroom **FREE:** Pre-registration required:

Visit www.usbg.gov



Saccharum officinarum

## Children's Program BAT HUNT!

Lee Coykendall, USBG Children's Education Specialist

Come as a bat, come as a plant pollinated by a bat, or simply join us and learn about bats. There will be bat-related activities throughout the Conservatory - come and learn why bats matter!

Date: Saturday, October 31 Time: 10 a.m. to 5 p.m. **Location:** Conservatory

FREE: No pre-registration required



#### Tour

## LUNCHTIME TOUR OF THE CONSERVATORY

USBG Volunteers

Want to visit a jungle, desert and tropical paradise? Want to travel back to the U.S. Exploring Expedition and the Jurassic period? Take a tour with a knowledgeable guide who will connect the exotic plant world to everyday life. You might see bananas, cacao and coffee ripening on the tree or learn about the next big breakthrough in medical plant research.

Dates: Mondays, November 2, 9 Dates: Wednesday, November 4 Dates: Friday, November 6 Time: 12 p.m. to 1 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required



## Tour MEDICINAL AND POISON PLANTS AT THE USBG

Beth Burrous, Biochemist and USBG Volunteer

Many important medicines are derived from plants, but too much of a good thing can be dangerous. During a walking tour of the Conservatory, Beth Burrous will feature poisonous and medicinal plants growing at the



USBG. She will talk about famous, interesting and sometimes fatal cases of poisoning by plants. You will also see and learn about plants used to make life-saving medicines.

Date: Tuesday, November 3 Time: 12 p.m. to 1 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required

## **Tour**

## An Afternoon in the Garden

USBG Volunteers

What do manila folders, Chanel No. 5, vanilla and fossil fuels have in common? They all come from plants on permanent display in the USBG Conservatory. Take a tour with a knowledgeable guide who will connect the exotic plant world to everyday life. You might see bananas, cacao and coffee ripening on the tree or learn about the next big breakthrough in medicinal plant research.

Dates: Tuesdays, November 3, 10

Time: 2 p.m. to 3 p.m.

Location: Tour meets in the Conservatory Garden Court

FREE: No pre-registration required

## Children's Program SPROUTS REUNION!

Lee Coykendall, USBG Children's Education Specialist

Where have all our Sprouts gone? Come back to the Garden, see old friends and venture through the Conservatory exploring many different children's activities. While the program is designed for parents and children who participated in the Sprouts program, all children are welcome to attend!

Date: Wednesday, November 11 Time: 10 a.m. to 12 p.m.

Location: Conservatory

FREE: No pre-registration required



# Tour FALL TREE TOUR OF THE CAPITOL GROUNDS

Melanie Choukas-Bradley, Author, City of Trees

Autumn is a magnificent time to appreciate the architecture and colorful foliage of the historic trees that grace the U.S. Capitol grounds. Stroll around the Capitol, admiring and learning about grand old tree specimens from around the country and the world, including many official state trees and memorial plantings. Melanie Choukas-Bradley will focus on autumn

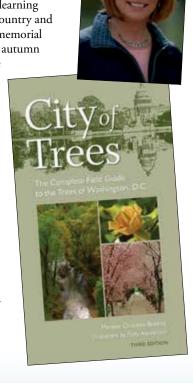
fruits and leaves, and teach how to identify diverse species of oak, maple, beech, buckeye and many other trees. She will share history of the Capitol Grounds and the city of Washington. Binoculars optional, but recommended. Participants are encouraged to bring their own brown bag lunch to enjoy with Melanie after the tour. **Please note:** This tour is held outdoors. We suggest bringing sunscreen, protective clothing and water. The tour is canceled if it rains. Hearing aid compatible assistive listening devices are available during the tour.

**Date:** Saturday, November 14 **Time:** 10 a.m. to 1 p.m.

Location: Tour will meet on the Terrace by the

entrance to the Conservatory

FREE: Pre-registration required: Visit www.usbg.gov





# **Upcoming Programs**

Mark your calendars for these programs in early January!

## Children's Program SEEDLINGS

Lee Coykendall, USBG Children's Education Specialist

Come learn just how amazing plants really are during our Seedlings class (ages 6-10). Each week will be a mix of hands-on investigations, planting projects and sciencebased activities. Please note: Students must be at least 6 years of age and accompanied



by an adult. Seedlings is designed for a more advanced level of plant science education. For the benefit of all participants, we request that only children ages 6 and up attend and share in class activities.

Dates: Tuesdays, January 5, 12, 19, 26

Time: 10:30 a.m. to 12 p.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov\*

\*Please note: Registration opens on Wednesday, December 2 at 10 a.m.

## Children's Program

### SPROUTS

Lee Coykendall, USBG Children's Education Specialist

Bring your preschooler (ages 3-5) to the U.S. Botanic Garden for plant-related fun. Each Wednesday session will have varied activities that may include a story, art activity or walk in the garden. Please note: Children must be accompanied by an adult. Participating children must be at least 3 years of age.

Dates: Wednesdays, January 6, 13, 20, 27

Time: 10:30 a.m. to 11:30 a.m. Location: Conservatory Classroom

FREE: Pre-registration required: Visit www.usbg.gov\*

\*Please note: Registration opens on Wednesday, December 2 at 10 a.m.



## Garden Tours on Your Mobile Phone

Now you can have a private tour of the gardens and plants at the U.S. Botanic Garden Conservatory and National Garden. You are invited to use this tour when you visit or listen from home.

#### How the tour works:

- Call the tour number: 202-730-9303.
- Enter the stop number from the Conservatory or National Garden to hear the message.
- Smartphone users: After dialing the tour number, you will be sent a text message with instructions for streaming audio access.

## Conservatory

1 - USBG Brief History

10 - Garden Court

20 - West Gallery

30 - Rare & Endangered Plants

50 - Orchids

60 - Medicinal Plants

70 - World Deserts

80 - Hawaii

90 – Garden Primeval

100 - Plant Adaptation

120 - Children's Garden

130 - The Tropics

140 - Southern Exposure

## National Garden

700 - National Garden Overview

705 - Regional Garden

710 - Butterfly Garden

715 – Rose Garden

720 - Piedmont vs. Coastal Plain

725 – Stream

730 - Cycle of Fire

735 - Sustainability

740 - Amphitheater

745 - First Ladies Water Garden

750 - Lawn Terrace

You may hang up and redial the tour at anytime. During the tour, you can control the audio by pressing 1 to rewind the recording, 2 to pause/play the recording, or press # to skip the recording.

Normal fees from your carrier may apply to your call.

## **Become a Junior Botanist!**

Hey kids! The U.S. Botanic Garden is looking for Junior Botanists. Who are these strange green life forms among us? Since they make our lives possible, it is a good idea to get to know them! When you visit the USBG bring along an adult advisor with an official ID (such as a driver's license) and check out a Junior Botanist Adventure Field Kit. The backpack is filled with cool tools to use during your explorations. When you complete each of the Adventure Sheets you will become an Apprentice Junior Botanist. Follow up your visit to the USBG with an at-home activity, then apply to our botanist and become an official USBG Junior Botanist. Please note that completion of the Adventure Sheets usually takes an individual several visits. The program is free. Please note: Schools may reserve Junior Botanist on Fridays by contacting our Children's Education Specialist at lcoykend@aoc.gov.

Upon successful completion of the Adventure Sheets, Junior Botanists will receive a certificate signed by our botanist, a field journal and explorer's lens.





## The National Fund for the United States Botanic Garden

The National Fund for the United States Botanic Garden was initially established as a 501(c)3 in 1989 to fund and build the National Garden. The National Fund now supports the educational activities of the USBG, including the Hands On Plant Science (HOPS) summer camp, the National Garden Internship, Landscape for Life and D.C. Teachers Night.

#### Partners in Education

The U.S. Botanic Garden and the National Fund for the United States Botanic Garden jointly sponsor public programs. Registration fees for programs are administered by the Fund. These fees allow the Garden to provide a range of educational programs, in addition to outstanding instructors and lecturers. Please consider becoming a Friend of the National Fund and help support the U.S. Botanic Garden's many on-site educational programs and events.

## Contributions are tax-deductible. Membership benefits are listed below:

## Friend (\$75 per year)

- Complimentary admission for you and your family to the Holiday Show Preview event
- Discounted registration fees for programs sponsored by the USBG
- National Fund Newsletter
- Quarterly USBG Calendar of Events

## Junior Friend (for First Friends under 40; \$150 per year)

- All benefits listed above plus:
- Two complimentary admissions to the Spring Cocktails in the Garden event

## First Friend (\$250 per year)

All benefits listed above

## National Friend (\$500 per year)

- All benefits listed above plus:
- Two additional admissions (4 total) to the Spring Cocktails in the Garden event

## Capitol Friend (\$1,000 per year)

- All benefits listed above plus:
- Two additional admissions (6 total) to the Spring Cocktails in the Garden event

## To learn more visit www.nfusbg.org/membership

# **About Registration**

- Class sizes are limited. Early registration is recommended.
- To register online for programs, go to the U.S. Botanic Garden website at www.usbg.gov.
- To register by mail, complete the form and send to: Registrar, U.S. Botanic Garden, 245 First St SW, Washington, DC 20024
- To register by telephone with a credit card, call 202-225-1116.

**USBG Program Registration Form** 

Please print

- Registration fees must be paid in advance. Payment cannot be accepted at the door.
- The U.S. Botanic Garden reserves the right to substitute instructors or cancel programs when necessary.
- Registration fees will be refunded only in the case of program cancellation by the U.S. Botanic Garden.

| Name: Mr. & Mrs./Mr./Ms.  |            |                   |      |
|---|------------|-------------------|------|
| Street Address  |            |                   |      |
| City State  | !          | Zip               |      |
| Phone (Required) Daytime  | Evening    | Evening           |      |
| E-mail Address  |            |                   |      |
| Please indicate (X)   |            |                   |      |
| □ I am a current FRIEND. □ I would like to become a FRIEND. \$75 □ I would like to become a JUNIOR FRIEND. For First Friends under 40; \$150 per year □ I would like to become a FIRST FRIEND. \$250 □ I would like to become a NATIONAL FRIEND. \$500 □ I would like to become a CAPITOL FRIEND. \$1,000 |            |                   |      |
| Title   |            | # of Participants | Fees |
|   |            |                   |      |
|   |            |                   |      |
|   |            |                   |      |
|   |            |                   |      |
|   |            |                   |      |
|   | FRIEND     | membership        |      |
| Make check payable to NFUSBG or charge to   |            |                   |      |
| ☐ Visa ☐ Mastercard ☐ Discover  | Total Fe   | es                |      |
| Card Number   | Expiration | on Date           |      |
| Signature   |            |                   |      |
|   |            |                   |      |

Mail registration form to: Registrar, U.S. Botanic Garden, 245 First St., SW, Washington, DC 20024

# United States Botanic Garden 245 First Street, SW Washington, DC 20024