



EDUCATION & EVENTS GUIDE

FALL & WINTER 2016-2017

join us at **SARAH P. DUKE GARDENS**
FALL & WINTER 2016-2017

Visiting Duke Gardens	4
An Invitation to Membership	6
Volunteering at Duke Gardens	8
Children, Family & School Programs	10
School Programs	15
Free Events & Special Programs	19
Calendar & Map pullout	20b
Gardening & Horticulture	22
Certificate Programs	34
Nature Photography	36
Japanese Tea Gatherings	37
Registration Form	39

Photo credits:
Cover photo by Micaela Unda

Other photographers:

Kavanah Anderson

Robert Ayers

Rick Fisher

Lindsey Fleetwood

John Geneczko Jr.

Kaitlin Henderson

Jason Holmes

Sue Lannon

Alain Michot

Jordan Montgomery

Sarah Leach Smith

Orla Swift

Hope Wilder

Ashley Wong





letter from the

**DIRECTOR OF EDUCATION
& PUBLIC PROGRAMS**

Dear Friends,

Research about the benefits we receive from nature continue to grab everyone's attention. For instance, the January 2016 National Geographic cover story was titled "This Is Your Brain on Nature." The article gathered much of the current research about the impact of nature on our brains, bodies and emotions. One study of 30,000 residents in Toronto demonstrated that those living in closer proximity to trees had health gains similar to those one sees from a \$20,000 raise!

All of us benefit from being outdoors; children do better in school and neighbors become more neighborly when there is green space around their homes. Even a window view speeds the recovery of hospital patients.

In this publication you can learn all the ways to become involved in nature at the Gardens:

- Become a Friend of Duke Gardens and support the Gardens efforts to spread the understanding of nature's benefits (see page 6).
- Enjoy the many exhibits planned for this season: the Fabulous Fall Mums, the Orchid Exhibit, the Nature Photo Exhibit and the 4th Annual Art and Nature Exhibit (see page 19).
- Stroll the new Beverly and Bert Welch Woodland Garden Overlook and Stream garden.
- Watch for POP-UP Exploration Stations on weekdays and weekends from 1-3 pm (see page 20).
- And please enjoy all of Duke Gardens this season, open every day from 8 am-dusk with no entry fee. Parking fees apply 9 am-5 pm M-F and 1-5 pm Sa/Su.

ONLINE REGISTRATION IS COMING!

The best news of the season is that we are implementing a new registration system that allows for easy online registration. Please watch for additional notices when it becomes available. We are very excited about this and believe it will improve your experience here at the Gardens.

A handwritten signature in black ink that reads "Jan Little". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Jan Little, Director of Education and Public Programs

LEARNING
INSPIRATION
ENJOYMENT



VISITING DUKE GARDENS

Celebrate the seasons and enjoy a beautiful and award-winning garden. You are welcome to enjoy the Gardens at your own pace, and the Visitor Guide & Map will give you information about all four areas of Duke Gardens. Additional information is available; please check at the Doris Duke Center or the Gothic Gate Kiosk.

PLEASE REGISTER YOUR GROUP VISIT: We ask that all groups of 15 or larger register with the Gardens so we may coordinate your activities with other groups scheduled for the same day. Please call 919-668-1707.

GARDEN TOURS: Tours fill up rapidly; we ask for advance reservations by 1:00 pm the previous day. Please call 919-668-1707 to make a reservation.

WALKING TOURS: The best way to explore this garden is on foot, led by a knowledgeable Gardens docent. Walking tours give you the chance to explore all the diverse areas of Duke Gardens at a leisurely pace. Smell the flowers, enjoy the hidden gems and discover your favorite space in the Gardens. We can accommodate any size group with 1 docent per 15 participants.

TROLLEY TOURS: Trolley tours take you on a central path in the Gardens so you see the blooms of the day and learn more about the Gardens' history. This tour cannot encompass the entire Gardens but will give you a beautiful overview. No minimum, but a maximum of 5 people in a shared trolley.

TOUR INFORMATION:

- Offered Tuesdays through Fridays, from mid-March through mid-November.
- 10 am, with an additional tour available at 2:00 pm in spring and fall.
- Allow for 1 to 1½ hours.
- \$10 per person; advance reservations held with payment.
- All trolley tour participants must be seated with a seatbelt; children may not ride on an adult's lap and car seats are not permitted.
- No pets allowed on trolley, with the exception of service animals.

*Help us build the future of Duke Gardens
by becoming a member today.*



SARAH P. DUKE GARDENS IS OPEN FROM 8 AM TO DUSK, 365 DAYS A YEAR.

ADMISSION: NO CHARGE; DONATIONS ARE APPRECIATED.

PARKING: THE FEES FOR PARKING HELP ENSURE THAT SPACES ARE AVAILABLE FOR GARDENS VISITORS.

DORIS DUKE CENTER HOURS: 9 AM-6 PM MON.-FRI.; 9 AM-5 PM SAT.; NOON-5 PM SUN., EXCEPT HOLIDAYS.

GENERAL INFORMATION: 919-684-3698, OR GARDENS.DUKE.EDU.

TERRACE CAFÉ: Serves sandwiches, salads and ice cream. Located in the cottage on the left as you enter the Terrace Gardens via the pergola.

Café hours (seasonal and weather permitting): Mon.-Fri., 11 am-3 pm / Sat., 10 am-4 pm / Sun., noon-4 pm. Groups may arrange lunches at least three days in advance by calling 919-660-3957.

PARKING: Two lots are available just inside the Anderson Street entrance to the Gardens. The fees for parking help ensure that spaces are available for Gardens visitors. Parking fees apply on Monday – Friday from 8 am to 5 pm, and Saturday/Sunday from 1 pm to 5 pm. Parking passes are available for purchase from the machines located in each parking lot. If a machine is malfunctioning, please go to the information desk inside the Doris Duke Center.

Weekend parking update: Duke Gardens now offers weekend parking in two nearby lots. One is south of the Gardens entrance on Anderson St. before the intersection with Campus Drive (pay & park), and the second is at Duke University's H Lot, at the corner of Yearby Avenue & Anderson Street. The H lot is a 5-minute walk from Duke Gardens' main entrance and is open and free 8 am to 8 pm on Saturdays, Sundays and holidays.

Duke Gardens is a museum of plants. Please help us care for this botanic garden and ensure that all visitors enjoy their time here by refraining from the following:

- Climbing trees, swimming or wading in any water
- Using sports equipment, balls, balloons or kites
- Feeding the wildlife, except for approved duck food (purchase in The Terrace Shop)
- Riding bicycles, skates, skateboards, scooters, etc.
- Smoking

Please also abide by the following policies:

- Stay on paths
- Keep dogs leashed (6-foot maximum) and out of plantings
- Portrait photography is by permit only
- Leave plants and all plant parts for everyone to enjoy
- Carry out what you carry in

A full list of policies is posted at entrances and online.

Thank you for your cooperation.



AN INVITATION TO MEMBERSHIP

Sarah P. Duke Gardens is enjoyed free of charge by more than 300,000 people annually. Over half of our yearly operating budget comes from people like you, who value all that this world-class botanic garden has to offer. Please consider the opportunity to support Duke Gardens by joining today.



All membership levels include these benefits:

- 20% discount on most education programs
- Free admission to select education programs and select member events
- 10% discount on Terrace Shop purchases
- Reciprocal admission benefits to nearly 300 gardens in North America
- Online access to Duke Gardens publications
- Free subscription to *Better Homes & Gardens* magazine

*Support Sarah P. Duke Gardens through membership in Friends of Duke Gardens!
Call 919-668-1711 or go to gardens.duke.edu/support/gardens-membership*

BASIC MEMBERSHIP LEVELS

Duke students	\$25
Individual.....	\$50
Dual (spouses/partners)	\$75
Family (includes children under age 18).....	\$100

SUPPORTING MEMBERSHIP LEVELS

TERRACES SOCIETY	\$250
-------------------------------	-------

Includes membership benefits above plus:

- Duke Gardens calendar
- 20% discount on Gothic Bookshop purchases (valid membership card required)
- 2 complimentary Dual gift memberships (please provide names & addresses of recipients)
- Annual Report
- *Flora* magazine
- Invitations to special Friends events

IRIS SOCIETY	\$500
---------------------------	-------

Includes Terraces Society benefits plus:

- Duke Gardens note cards
- 2 complimentary registrations for a Gardens education program

PERGOLA SOCIETY	\$1,000
------------------------------	---------

Includes Iris Society benefits plus:

- Complimentary Gardens parking

DIRECTORS SOCIETY	\$2,500
--------------------------------	---------

Includes Pergola Society benefits plus:

- Invitation to reception/dinner with a featured guest speaker

MARY DUKE BIDDLE SOCIETY	\$5,000
---------------------------------------	---------

Includes Directors Society benefits plus:

- Invitation to a behind the scenes tour

MARY D. B. T. SEMANS SOCIETY	\$10,000
---	----------

Includes Mary Duke Biddle Society benefits plus:

- 1 complimentary trolley tour with director, schedule permitting (reservations must be made at least 1 week in advance)

Please contact us to learn about additional membership societies and giving opportunities. You may leave a legacy at Duke Gardens in a variety of ways, including naming options throughout the Gardens. All memberships are part of the Duke Annual Fund and are used entirely for the benefit of Duke Gardens. Duke alumni also receive reunion class gift credit.

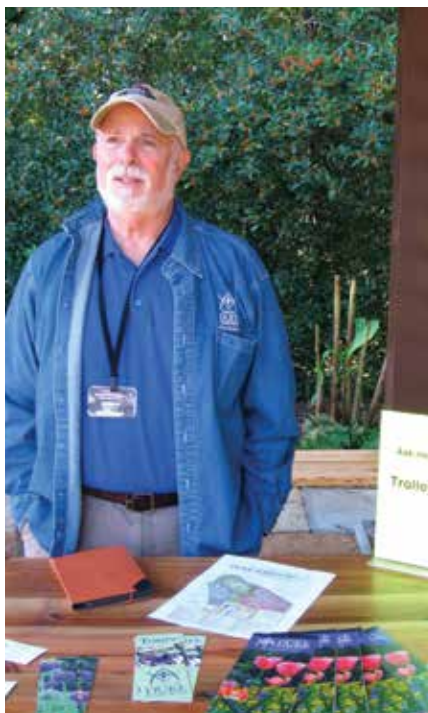


VOLUNTEERING IN THE GARDENS

Be a Force of Nature — Volunteer

Expand your knowledge of the natural world as you help connect people with the Gardens. Volunteers are essential at Sarah P. Duke Gardens, helping to create a better garden and a better community. Bring your interest, energy, knowledge and passion to Duke Gardens and help make each guest's visit more beautiful and enriching.

Whether you are interested in gardening, visitor services, administrative support or education, volunteering at Duke Gardens is a way to give back to your community. You will meet people of similar interests, learn new skills and have fun.





BENEFITS TO VOLUNTEERS:

- The satisfaction of supporting a public garden and furthering the Gardens' mission
- Increased gardening skill/knowledge
- Invitations to Gardens events and monthly lectures
- Education and gift shop discounts

If you are interested in joining the volunteer family at Duke Gardens, contact director of volunteer services Chuck Hemric at 919-668-1705 or chemric@duke.edu to enroll in the next volunteer orientation and complete an application at gardens.duke.edu/support/volunteer.





CHILDREN, FAMILY & SCHOOL PROGRAMS

HOMESCHOOL & FAMILY PROGRAMS

NATURE ADVENTURES CAMP FOR A DAY

School's out, but camp's going strong this fall on teacher workdays! Join our stellar Nature Adventures team for a day of fun, including games, crafts, outdoor explorations, and hands-on activities in the beautiful Gardens.

CHILD'S GRADE LEVEL	DATE OF CAMP	CAMP TOPIC	FEE
GRADES K-5	OCT. 31, 9 AM-4 PM	CREEPY CRAWLIES CAMP	\$50
GRADES K-5	NOV. 8, 9 AM-4 PM	HARVEST CAMP	\$50
GRADES K-5	NOV. 11, 9 AM-4 PM	GARDENS GAMES CAMP	\$50

LOCATION: ARRIVAL AND PICKUP AT DORIS DUKE CENTER.
 PARTIAL SCHOLARSHIP APPLICATION AVAILABLE UPON REQUEST.
 NON-REFUNDABLE DEPOSIT OF \$25 PER CHILD PER DAY IS REQUIRED TO RESERVE A SPOT.
 FULL PAYMENT DUE 2 WEEKS BEFORE THE DATE OF CAMP.

NATURE STORYTIME

THURSDAYS, 10:30 AM

Free!

Enjoy the outdoors with a story read aloud in the Gardens. Nature-themed stories are followed by a related activity or garden walk.

SEPTEMBER	SEPT. 1	SEPT. 8	SEPT. 15	SEPT. 22	SEPT. 29
OCTOBER	OCT. 6	OCT. 13	OCT. 20	OCT. 27	

LOCATION: PLEASE MEET IN THE CHARLOTTE BRODY DISCOVERY GARDEN STORY CIRCLE.
Free drop-in event. Parking fees apply.

Look for this icon to identify NEW classes! **New!** Look for this icon to identify FREE DROP-IN events! **Free!**

Look for this icon that represents classes that may be combined for a further DISCOUNT on enrollment fee. **Series!**

NATURE NAVIGATORS CERTIFICATE PROGRAM

Explore the natural world with our new certificate program for young naturalists! All classes listed below are eligible for certificate credit.

REQUIREMENTS:

- Certificates available for three age groups: children ages 4-5, 6-8 or 9-12 years old. All classes listed below qualify towards completion of your certificate. Please feel free to complete all three certificates as you meet the age ranges.
- Complete at least 6 Duke Gardens classes of your choice: 3 in the spring and 3 in the fall for each certificate.
- Keep track with stamps in your Nature Navigators Passport.
- Complete an observational field notebook at home with age-appropriate prompts.

Upon completion of each age range certificate program, you will receive a Nature Navigators certificate and a surprise reward that will help you pursue your nature studies at home.

No additional fee to participate in the certificate program; registration required before attending each class.



PROGRAMS FOR CHILDREN AGES 3-5. ADULT CHAPERONE REQUIRED.

NATURE FOR SPROUTS

8 FRIDAYS, SEPT. 9-OCT. 28, FROM 10:30-11:30 AM

Series!

Explore the outdoors at Duke Gardens with your child. Each week we will have stories, songs, movement, observation and hands-on, creative projects that explore the Gardens. Sign up for one or more sessions.

SEPTEMBER	SEPT. 9	SEPT. 16	SEPT. 23	SEPT. 30
OCTOBER	OCT. 7	OCT. 14	OCT. 21	OCT. 28

FOR CHILDREN AGES 3-5. ADULT CHAPERONE REQUIRED.

LOCATION: MEET AT THE DORIS DUKE CENTER.

FEE: GARDENS MEMBERS \$7; GENERAL PUBLIC \$10.

REGISTER FOR ALL EIGHT SESSIONS AT \$6/\$9 PER SESSION.

Parking fees apply.

Support our Family membership level and receive 20% off most education programs for entire family!

HOMESCHOOL & FAMILY PROGRAMS

PROGRAMS FOR CHILDREN AGES 4-5 AND 6-8

DATE	PROGRAM TITLE & DESCRIPTION
MONDAY, SEPT. 12	DRAGONS, DAMSELS AND NYMPHS Explore the fairytale-like underwater world of pond insects. We'll learn about their life cycles, scoop for nymphs and watch adult insects fly through the air.
MONDAY, SEPT. 26	BEEES, BUGS AND BUTTERFLIES Prowl through the Gardens looking for insects and learn about their many different life stages. We will practice observing, recording and identifying skills. Expand your appreciation for nature's diversity!
MONDAY, OCT. 10	FALL FORESTS Fall is a wonderful time to explore the woods. See how native plants and animals prepare for winter and find food sources from trees and shrubs in the fall forest.
MONDAY, OCT. 24	BIRD MIGRATIONS & NAVIGATION Learn about the adaptations birds have to navigate the globe when the seasons change. Use compasses and find your way through a Gardens scavenger hunt like a migratory bird.
MONDAY, NOV. 7	CAMOUFLAGED CRITTERS Have you ever wished you could be invisible? Learn how the adaptation of camouflage protects and disguises creatures in nature.
MONDAY, NOV. 21	MATH IN THE GARDENS Math is hiding all around us in the patterns of nature. We will count, measure and multiply with real-world objects as we observe the patterns of math in the gardens.

EACH PROGRAM:

SECTION A: FOR CHILDREN AGES 4-5; 10:30-11:30 AM. ADULT CHAPERONE REQUIRED.

SECTION B: FOR CHILDREN AGES 6-8; 10:30 AM-NOON.

PLEASE ASK ABOUT OUR YOUNGER SIBLING POLICY.

LOCATION: PLEASE MEET AT THE DORIS DUKE CENTER

FEE: GARDENS MEMBERS \$7 PER SECTION; GENERAL PUBLIC \$10 PER SECTION

REGISTER FOR 5 OR MORE CLASSES AT A FEE OF \$6/\$9.

Parking fees apply.

NORTH AMERICAN BUTTERFLY ASSOCIATION: DURHAM BUTTERFLY COUNT

Join a local butterfly count at the NABA website listed here:

www.naba.org/counts/participate.html

Sunday, Aug. 21

Look for this icon to identify NEW classes! **New!** Look for this icon to identify FREE DROP-IN events! **Free!**

Look for this icon that represents classes that may be combined for a further DISCOUNT on enrollment fee. **Series!**

RAISING EASTERN BLACK SWALLOWTAIL BUTTERFLIES

Lori Carlson, Duke Gardens docent

SATURDAY, SEPT. 17

Learn how to raise eastern black swallowtail butterflies through their winter hibernations for release in your own back yard. Lori will work with you to explore the life cycle and how to care for and feed the butterflies. The class will end with a scavenger hunt for children to find butterflies and host plants, while parents work directly with Lori to complete their understanding of butterfly care. Each child will receive a butterfly box, host plants, a caterpillar or chrysalis and Lori's reference booklet to take home. Together your family can enjoy watching one of nature's many miracles. .

FOR CHILDREN AGES 5-8. ADULT CHAPERONE REQUIRED.

SATURDAY, SEPT. 17, 10:30 AM-NOON • LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 10 CHILDREN • FEE: \$35 PER CHILD. INCLUDES ALL KIT MATERIALS TO TAKE HOME.

PROGRAMS FOR CHILDREN AGES 9 AND UP

RAISING MONARCH BUTTERFLIES

Lori Carlson, Duke Gardens docent

MONDAY, OCT. 3

Monarch butterflies are inspiring. Four life stages for each butterfly and four generations per year! It's the late fall generation that sets off on its amazing migration south for the winter, returning to our neighborhoods in the spring to begin the process all over. Learn about this as Lori takes you through the life of a monarch and explains how to house and feed them. Each participant will receive a butterfly box, host plants, a caterpillar or chrysalis (depending upon season) and Lori's booklet of reference materials to take home.

FOR CHILDREN AGES 9 AND UP.

MONDAY, OCT. 3, 10:30 AM-NOON • LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 10 CHILDREN • FEE: \$35 PER CHILD. INCLUDES ALL KIT MATERIALS TO TAKE HOME

FALL HARVEST WORKSHOP: THE GARDEN

MONDAY, OCT. 17

Get hands-on gardening experience when you help us bring in some of the harvest from the Charlotte Brody Discovery Garden. We will prepare a table of seasonal produce and share an autumn feast, as well as a garden gift to take home.

FOR CHILDREN AGES 9 AND UP.

MONDAY, OCT. 17, 10:30 AM-NOON • LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 10 CHILDREN • FEE: \$15 PER CHILD.

HOMESCHOOL & FAMILY PROGRAMS

FALL HARVEST WORKSHOP: THE FOREST

MONDAY, NOV. 14

Explore the Blomquist Garden of Native Plants to find examples of food sources for people and animals. Then we return to the classroom to make and enjoy some wild-harvested foods, including acorn pancakes and delicious wild teas, and craft a bamboo cup to take home.

FOR CHILDREN AGES 9 AND UP.

MONDAY, NOV. 14, 10:30 AM -NOON • LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 10 CHILDREN • FEE: \$15 PER CHILD

WHAT'S GROWING IN THE GARDEN? ALL AGES

6 THURSDAY AFTERNOONS, SEPT. 8-OCT. 13, 4-5:30 PM

Series!

Join us in the Charlotte Brody Discovery Garden to learn about fruits and vegetables and how they grow. Plant, harvest and taste seasonal produce, explore different ways to use herbs, hear stories, play games and make art inspired by the garden.

SEPTEMBER	SEPT. 8	SEPT. 15	SEPT. 22	SEPT. 29
OCTOBER	OCT. 6	OCT. 13		

LOCATION: MEET AT THE ENTRANCE TO CHARLOTTE BRODY DISCOVERY GARDEN

FEE: GARDENS MEMBERS \$7; GENERAL PUBLIC \$10.

REGISTER FOR ALL SIX SESSIONS AT \$6/\$9 PER SESSION.

Parking fees apply.

CLASSROOM OPEN HOURS

Welcome, unschoolers and homeschoolers alike, to an open-ended exploration in our learning laboratory. Tinker to your heart's content, rearrange moving parts and explore our nature museum and teaching library. Or just play in the "squishy corner" specially made for small people. An on-site staff member will answer questions, help with using materials, and set up learning explorations.

FOR PARENTS AND CHILDREN TOGETHER; ALL AGES.

14 TUESDAYS, SEPT. 13-DEC. 13, 1-3 PM. DROP-IN FEE: \$3 PER CHILD, \$8 PER FAMILY.

A SEASON PASS CARD FOR ALL 14 DATES IS AVAILABLE FOR \$28 PER CHILD, \$98 PER FAMILY.

Support at our Iris membership level and receive two complimentary registrations for our Education Programs!

SCHOOL PROGRAMS

All same-age groups are welcome to register for these programs. Children's groups with a variety of ages should contact us to arrange a program specifically suited to your group.

Sarah P. Duke Gardens School Programs

Our school programs introduce students to the wonders and complexities of our natural world. Each program is age-appropriate and supports the North Carolina Standard and Extended Course of Study. The programs are led by skilled docents familiar with the Gardens and the programs. Please let us know how we can extend your classroom study through a garden visit and be an active partner with your school.

GUIDED GARDENS SCHOOL PROGRAMS:

Available Tuesday through Friday. Correlating standards are listed below. Each program is planned for 1 to 1 ½ hours, or enriched and extended if your schedule allows. Fee of \$4 per student, with the exception of Garden Walk (\$2 per student); \$40 minimum.



SELF-GUIDED GROUPS IN THE GARDENS: Advance registration is required so we may coordinate your visit with other schedules. Self-guided groups are welcome in all areas of the Gardens except the Blomquist Garden. Tours of the Blomquist Garden of Native Plants, which contains rare and endangered plants, are only available when led by trained Gardens docents. Please register by emailing gardenseducation@duke.edu.

HOW TO REGISTER: Registration is required for all groups planning to visit the Gardens. Thanks for working with us to register your group; collaboration helps us prepare and provide the best experience for your students. We will accommodate your visit on a first-come, first-served basis. Once we reach capacity, those groups without pre-registration may be asked to reschedule their visit.

CHAPERONES: Adult chaperones are required for all youth groups. We recommend a ratio of 3 chaperones per 15 students.

WEATHER: We do take groups out in the rain, unless there is threatening weather that includes lightning; in that case we will reschedule.

CANCELLATION POLICY: You may cancel your enrollment and receive a refund of your fee up to a week before the date of your program. Any program canceled by Duke Gardens will result in a complete refund.

Call 919-668-1707 or email gardenseducation@duke.edu.

SCHOOL PROGRAMS

ALL GRADE LEVELS

- **DISCOVERY GARDEN:** Introduce students to agriculture and sustainable gardening. What's the difference between a fruit and a vegetable? What parts of plants do we eat? See bees, chickens, an orchard, vegetables and fruits, a historic tobacco barn and more.
- **MATH IN THE GARDENS:** Measure, multiply or map your way through the garden. Learn about the different kinds of math garden staff use every day and solve your own garden math problem. Program content will be adjusted to match appropriate grade level standards.
- **A GARDEN WALK:** For larger groups with limited time. A guided walk, planned for 1 hour or less, to introduce students to the four major areas of the garden. Fee of \$1 per student.

PRE-K & K

- **FARM AND FOLK TALES:** Learn about fruits, vegetables and animals in the garden through stories and garden activities.
- **SENSE-ATIONAL STROLL:** Engage all of your senses as you touch, smell, hear, taste and see your way through the garden on this guided walk.
- **BIRDS AND BUTTERFLIES:** Look up to discover the amazing world of winged wildlife in the garden. Through song and movement, learn how birds and butterflies are born.
- **DIRT AND WORMS:** Take a close look at life underground and learn how wiggling worms help the garden grow. What is a worm's life cycle? How do they move? What do they eat? Learn this and more.
- **KNOCK, KNOCK. WHO'S THERE?** Tiptoe through the garden to find signs of animals at home. Learn who lives in the ground and who lives in a tree.

FIRST GRADE

- **HABITAT HUNTERS:** (*meets standard 1.L.1 / 1.L.2*) What do plants and animals need to survive? Go on a scavenger hunt to find animal homes in the Gardens. Find resources and learn how living things get what they need.

SECOND GRADE

- **A BUG'S LIFE:** (*meets standard 2.L.1.2*) What is an insect? Where do they live? Students will learn about and compare the life cycles of garden insects by studying them in their natural habitat.
- **DOUBLE EXPOSURE: Connecting Science and Art at Duke Gardens and Nasher Museum:** (*meets standard 2.E.1, 2.L.1.2*) An innovative program for 2nd grade school groups with a full day experience that connects science and art. Students visit both Duke Gardens and Nasher Museum of Art. To register, go to nasher.duke.edu/k-12/#k-12-tours or contact the Nasher's education office at 919-684-1169.
Free for DPS students. Otherwise standard fees apply.

Look for this icon to identify NEW classes! **New!** Look for this icon to identify FREE DROP-IN events! **Free!**

Look for this icon that represents classes that may be combined for a further DISCOUNT on enrollment fee. **Series!**

THIRD GRADE

- **SOIL CITY:** (*meets standard 3.L.2.4*) Explore the world of ants, earthworms, pillbugs and other soil dwellers. Students examine basic soil properties throughout the garden and discover how soil supports the growth and survival of living things.
- **PLANT POWER:** (*meets standard 3.L.2*) Take a trip through the life cycle of a plant. Learn the different plant structures and how they work to help the plant grow and thrive, and see examples of adaptations to extreme environments in our “plant museum.”
- **HAIKU TRAIL INTO THE GARDENS:** (*meets standard 3.C.1*) Collect words on a sensory walk through the Culberson Asiatic Arboretum, and write, revise and edit your experience into a crafted haiku poem.

FOURTH GRADE

- **AMAZING ADAPTATIONS:** (*meets standard 4.L.1.2*) What do desert succulents, tropical water lilies and our local squirrels have in common? Take a walk and see how plants and animals survive using amazing adaptations to their environments.
- **NATIVE TALES:** (*meets standard 4.H.1.1*) Plants have stories to tell. Discover plants used for food and medicine by Native Americans and in modern times in the Blomquist Garden of Native Plants.
- **HAIKU TRAIL INTO THE GARDENS:** (*meets standard 3.C.1*) Collect words on a sensory walk through the Culberson Asiatic Arboretum, and write, revise and edit your experience into a crafted haiku poem.

FIFTH GRADE

- **BEYOND THE POND:** (*meets standard 5.L.2.1*) Students will examine a pond ecosystem and evaluate the water quality by surveying the smallest creatures of the pond. Limited to 40 students.
- **GARDEN FOOD WEB:** (*meets standard 5.L.2*) Producers, consumers and decomposers in the Gardens are connected in a web of life. Students will create a food web from organisms they have seen in the Gardens, and they will learn the importance of all the community’s connections.
- **TREE DETECTIVES:** (*meets 5th grade science standards*) Learn the fundamentals of plant identification by examining detailed characteristics such as leaf arrangement and structure. Meet a tree and observe details and record your data with your scientific team.
- **HAIKU TRAIL INTO THE GARDENS:** (*meets standard 3.C.1*) Collect words on a sensory walk through the Culberson Asiatic Arboretum, and write, revise and edit your experience into a crafted haiku poem.

SCHOOL PROGRAMS

MIDDLE SCHOOL

- **THE FOREST AND THE FARM:** (*meets standards 6.H.2.3, AIS.G.2.3*) Explore the Blomquist Garden of Native Plants to learn how hunter/gatherer cultures found their food, and the Charlotte Brody Discovery Garden to learn about civilization's transition to agriculture.
- **HAIKU TRAIL INTO THE GARDENS:** (*meets standard 6.85*) Collect words on a sensory walk through the Culberson Asiatic Arboretum, and write, revise and edit your experience into a crafted haiku poem.
- **BEYOND THE POND:** (*meets standards 6.L.2.1, 8.E.1.3*) Students will examine a pond ecosystem and evaluate the water quality by examining benthic macroinvertebrates. Limited to 40 students.

HIGH SCHOOL

- **GENERAL TOUR:** Contact gardenseducation@duke.edu

TEACHER TRAININGS

LEARNING WITH NATURE: Teacher Training for Early Childhood Providers

Content will include indoor and outdoor hands-on activities that encourage interacting with nature, making environmental connections, facilitating conversations about nature with young children, and ideas for ways to bring nature into the classroom.

Available for groups upon request. Contact us for more details or to schedule this professional development opportunity. 2-4 hours. Participant limit: 25. Fee will be determined on a sliding scale.

TEACHER OPEN HOUSE FOR PRE K-12TH GRADE TEACHERS

TUESDAY, SEPT. 13, 4-6 PM

Experience activities that connect your classroom and students to nature in the Gardens. Learn about our age-appropriate programs for pre k-high school students that expand your classroom through science, art, math, language arts and social studies activities. Using all your senses — including taste — we will explore plant adaptations, witness the life cycle of a dragonfly, plant a seed in a pot made from re-used material and embark on a scavenger hunt. Light snacks and drinks provided. Pre-registration required; free to attend.

LOCATION: DORIS DUKE CENTER • FEE: FREE WITH PRE-REGISTRATION

Parking fees apply.

Please visit the “learn” page at gardens.duke.edu or call 919-668-1707.



FREE EVENTS & SPECIAL PROGRAMS

SATURDAY, SEPTEMBER 24

DUKE GARDENS FALL PLANT SALE

The fall plant sale will feature rare and unusual plants and bulbs, as well as some standards every southern garden should have. A wide selection of Duke Gardens propagated plants and hand-picked material from local suppliers will be offered. Duke Gardens members receive 10% off every purchase.

PUBLIC PLANT SALE, SATURDAY, SEPT. 24, 8 AM-NOON

Further information at gardens.duke.edu.

NATURE STORYTIME

THURSDAYS, 10:30 AM

Free!

Enjoy the outdoors with a story read aloud in the Gardens. Nature-themed stories are followed by a related activity or garden walk.

SEPTEMBER	SEPT. 1	SEPT. 8	SEPT. 15	SEPT. 22	SEPT. 29
OCTOBER	OCT. 6	OCT. 13	OCT. 20	OCT. 27	

LOCATION: PLEASE MEET IN THE CHARLOTTE BRODY DISCOVERY GARDEN STORY CIRCLE.

Free drop-in event. Parking fees apply.

FREE EVENTS & SPECIAL PROGRAMS

POP-UP

EXPLORATION STATION: Science activities for all

Free!

Explore the fun of plants, animals and gardening with seasonal activities for you and your family. Look for the “Exploration Stations” throughout the Gardens and enjoy seasonal demonstrations, experiments and hands-on projects at each station. Please see weekly schedule updates on our website at gardens.duke.edu.

SEPT., OCT. AND NOV., 1-3 PM
Free drop-in event. Parking fees apply.

NOVEMBER 6-9

A FESTIVAL OF FABULOUS MUMS

Presented by the Central Carolina Chrysanthemum Society and Duke Gardens

Free!

The Gardens will be an explosion of color this fall during the Festival of Fabulous Mums. Enjoy an exhibition of show mums grown by members of the Central Carolina Chrysanthemum Society in a dazzling floral display at the Doris Duke Center. This 3-day event will include cultural and historical information, arts and crafts, gardening tips, and tours of the William Louis Culberson Asiatic Arboretum, where you will find more mums on display in a beautiful garden setting.

FREE DROP-IN EXHIBIT FOR ALL AGES. ADULT CHAPERONE REQUIRED.

SUNDAY, NOV. 6, NOON-6 PM; MONDAY & TUESDAY, NOV. 7 & 8, 10 AM-6 PM
WEDNESDAY, NOV. 9, 10 AM-3 PM
Parking fees apply 9 am to 5 pm M-F and after 1 pm Sa/Su.

NOVEMBER 18-20

THE 2ND ANNUAL FALL FOR ORCHIDS EXHIBIT

Presented by the Triangle Orchid Society and Duke Gardens

Free!

Hundreds of blooming orchids in lush garden-like settings will be on display! This show, by members of the Triangle Orchid Society, is sanctioned by the American Orchid Society and will include judged plants of many species and varieties. It features exhibits by Orchid Societies from across North Carolina and neighboring states. In addition to enjoying the amazing displays with hundreds of flowering plants, you will have the opportunity to learn from experts in workshops about growing, repotting and caring for orchids. With your newfound knowledge, you may want to purchase plants and growing supplies available at the show. For details, please visit triangleorchidsociety.org or gardens.duke.edu.

FREE DROP-IN EXHIBIT FOR ALL AGES. ADULT CHAPERONE REQUIRED.

FRIDAY, NOV. 18, 1-4 PM; SATURDAY, NOV. 19, 9 AM-5:30 PM, & SUNDAY, NOV. 20, NOON-4 PM
Parking fees apply after 1 pm Saturday and Sunday.

SPECIAL RECEPTION FOR TERRACE SOCIETY MEMBERS AND ABOVE, FRIDAY, NOV. 18, 5:30-7 PM.

Look for this icon to identify NEW classes! **New!**

Look for this icon to identify FREE DROP-IN events!

Free!

Look for this icon that represents classes that may be combined for a further DISCOUNT on enrollment fee.

Series!

DECEMBER 10 • 3RD ANNUAL HOLIDAY CELEBRATION AT THE GARDENS: Make and take a variety of crafts from winter holidays around the world

Free!

Families learn about winter celebrations from different cultures and traditions from around the world. We will also include several time-tested winter crafts such as snowflake making, pine cone bird feeders (no peanuts) and colorful paper chains.

FREE DROP-IN ACTIVITIES FOR ALL AGES. ADULT CHAPERONE REQUIRED.

SATURDAY, DEC. 10, NOON-4 PM • LOCATION: DORIS DUKE CENTER

Parking fees apply.

FEBRUARY 10-12, 2017 NATURE PHOTOGRAPHY EXHIBIT

Free!

Nature photography requires technical skill, artistry and a never-ending sense of wonder. Enjoy photographs of nature by members of the Durham Photography Club at Duke Gardens at this exhibit. The displays will remind you of the amazing spectacle of nature in any season and brighten a winter's day.

FREE DROP-IN EXHIBIT FOR ALL AGES. ADULT CHAPERONE REQUIRED.

FRIDAY, FEB. 10, 4:30-8 PM, PLEASE JOIN US FOR AN ARTISTS' RECEPTION

SATURDAY, FEB. 11, 9 AM-4:30 PM • SUNDAY, FEB. 12, NOON-4:30 PM.

LOCATION: DORIS DUKE CENTER

Parking fees apply on weekdays from 9 am to 5 pm and Sa/Su after 1 pm.

SPECIAL RECEPTION FOR DUKE GARDENS MEMBERS, THURSDAY, FEB. 9, 5:30-7 PM

MARCH 18-22, 2017 ART AND NATURE: Artwork inspired by the Doris Duke Center Gardens at Duke Gardens

Free!

Enjoy an artist's perspective in artwork that celebrates the beauty and diversity of the Page-Rollins White Garden, the Charlotte Brody Discovery Garden, the Angle Amphitheater and all the gardens around the Doris Duke Center. These garden areas are the inspiration for the exhibiting artists.

FREE DROP-IN EXHIBIT FOR ALL AGES. ADULT CHAPERONE REQUIRED.

SATURDAY, MARCH 18, 4:30-6 PM, PLEASE JOIN US FOR AN ARTISTS' RECEPTION

MARCH 18, 20, 21, 22, EXHIBIT OPEN FROM 9 AM-4 PM. MARCH 19, EXHIBIT OPEN FROM 1-4 PM.

LOCATION: DORIS DUKE CENTER

Parking fees apply on weekdays from 9 am to 5 pm and Sa/Su after 1 pm.

SPECIAL RECEPTION FOR TERRACE SOCIETY MEMBERS AND ABOVE, FRIDAY, MARCH 17, 5:30-7 PM.



ADULT EDUCATION PROGRAMS

GARDENING & HORTICULTURE



**NORTH AMERICAN BUTTERFLY ASSOCIATION:
DURHAM BUTTERFLY COUNT**

Join a local butterfly count at the NABA website listed here:
www.naba.org/counts/participate.html

Sunday, Aug. 21

TRACKING BUTTERFLIES IN THE GARDENS

Lori Carlson, Duke Gardens docent

New!

Walk through the Gardens with Lori and find just where she looks for butterflies. Practice identifying butterflies in the wild and while in flight, while learning to identify many common local species. We will look at the daily habits and haunts of various butterflies and their preferred host plants. The class will finish with tips on how to develop your own garden to encourage more of these important pollinators.

SECTION A: SEPT. 9, 1-3 PM, SWALLOWTAILS & BRUSHFOOTS

SECTION B: SEPT. 16, 1-3 PM, SKIPPERS, HAIRSTREAKS & DUSKYWINGS

LOCATION: DORIS DUKE CENTER

PARTICIPANT LIMIT: 12

FEE: GARDENS MEMBERS \$20; GENERAL PUBLIC \$25.

FEE TO REGISTER FOR MULTIPLE SESSIONS \$18/\$22 PER SESSION.



Look for this icon to identify NEW classes!

New!

Look for this icon to identify FREE DROP-IN events!

Free!

RAISING BUTTERFLIES: Monarch and Eastern Swallowtails

Lori Carlson, Duke Gardens docent

Explore the curious lifestyle of butterflies. You will learn how to house and care for them through multiple life stages until you release them as adults. Lori will discuss the four to five life stages that precede the adult butterfly emerging in all its colorful wonder. Each participant will receive a butterfly box, host plants, one species of caterpillar or chrysalis (depending upon season) and Lori's booklet of reference materials to take home.

FOR PARTICIPANTS AGES 16 THROUGH ADULT

TUESDAY, SEPT. 20, 6:30 - 8:30 PM

LOCATION: GREENHOUSE CLASSROOM

PARTICIPANT LIMIT: 15

FEE: \$35 PER PARTICIPANT. INCLUDES ALL KIT MATERIALS TO TAKE HOME.

WALK ON THE WILD SIDE

*Stefan Bloodworth, curator, or Annabel Renwick, horticulturist,
Blomquist Garden of Native Plants, Duke Gardens*

Walk on the Wild Side has been helping people discover native North Carolina for almost ten years. Using the Blomquist Garden of Native Plants as an outdoor lab, you will learn of amazing adaptations, partnerships and systems that help plants thrive here. Held each first Thursday of the month, year round.

1ST THURSDAYS, AUG. 4, SEPT. 1, OCT. 6, NOV. 3, DEC.1, JAN. 5, FEB. 2, 11 AM-NOON

LOCATION: MEET AT THE BLOMQUIST GARDEN ENTRANCE

PARTICIPANT LIMIT: 15

FEE PER DATE: GARDENS MEMBERS \$7; GENERAL PUBLIC \$10

Pre-registration required. Parking fees apply.

GARDENING & HORTICULTURE

THE WOW FACTOR: Effective Planting Combinations for Your Garden

Bobby Mottern, landscape architect and Duke Gardens' horticulture director

The best gardens feel somehow effortless and exciting. They have a WOW impact that you want in your own garden. Bobby will introduce you to three different types of plants and discuss strategies for combining plants for maximum impact in your garden.

ALL SESSIONS HELD FROM 10:30 AM-NOON.

- **FALL CONTAINERS:** TUESDAY, SEPT. 13
- **ORNAMENTAL GRASSES:** TUESDAY, SEPT. 20
- **BULBS IN THE LANDSCAPE:** TUESDAY, SEPT. 27

LOCATION: MEET AT THE DORIS DUKE CENTER • PARTICIPANT LIMIT: 15

FEE PER SECTION: GARDENS MEMBERS \$15; GENERAL PUBLIC \$19.

FEE TO REGISTER FOR MULTIPLE SESSIONS \$13/\$17 PER SESSION.

Qualifies for Home Horticulture Certificate elective credit (1.5 hours each)

PLANTS OF DISTINCTION: Fall & Winter

Learn about spectacular plants that offer both beauty and functionality. Sign up separately for each session to learn a new group of beautiful and useful plants, or take all four sections.

BERRIES AND SEEDS FOR THE BIRDS • Wednesday, September 21, 2:30-4 PM

Stefan Bloodworth, curator of the Blomquist Garden of Native Plants, Duke Gardens

PLANTS THAT LIKE WET FEET • Wednesday, October 5, 2:30-4 PM

Jason Holmes, curator of the Doris Duke Center Gardens, Duke Gardens

MUM'S THE WORD: GROWING SHOW CHRYSANTHEMUMS

Wednesday, October 26, 2:30-4 PM

Michelle Rawlins, horticulturist, Culberson Asiatic Arboretum, Duke Gardens

BARK, BUDS AND BERRIES • Tuesday, February 28, 2:30-4 PM

Jason Holmes, curator of the Doris Duke Center Gardens, Duke Gardens

LOCATION: DORIS DUKE CENTER

FEE PER SECTION: GARDENS MEMBERS \$7; GENERAL PUBLIC \$10.

FEE TO REGISTER FOR MULTIPLE SESSIONS \$5/\$9 PER SESSION.

PARTICIPANT LIMIT: 15

Qualifies for Home Horticulture Certificate elective credit (1.5 hours each). Parking fees apply.

Look for this icon to identify NEW classes!

New!

Look for this icon to identify FREE DROP-IN events!

Free!

COOKING FROM THE GARDEN

Katie Coleman, chef, Durham Spirits Company

The season is abundant with bounty from the garden! Learn how to use that produce in this class series. Katie brings many years of experience as a chef and great skill at teaching people how to cook. Join us for one class, or the entire series. Each class includes in-class tastings.

AUTUMN SAVORY SALSAS AND SPREADS • Monday, September 26

Tomatoes, eggplants and squashes are the tastes of the season. Katie will teach you a variety of ways to use these and other vegetables to make fresh salsa and other delectable spreads. Learn the technique and then enjoy sampling the full variety.

LATE AUTUMN SALADS • Monday, October 24

Learn fresh, new ideas for late season salads. In this class Katie will introduce you to five salad recipes. We will make the salads as a group and then enjoy tasting each type!

WARM WINTER SOUPS • Monday, January 23

A cold winter day is always improved by a warm bowl of soup. Katie will introduce you to four winter soups (some vegetarian) and you will receive the recipes for all. As a group we will sample each of the soups in class.

3 MONDAYS, 6-8 PM

LOCATION: DORIS DUKE CENTER

FEE PER SESSION: GARDENS MEMBERS \$28; GENERAL PUBLIC \$35.

FEE TO REGISTER FOR MULTIPLE SESSIONS \$25/\$32 PER SESSION.

PARTICIPANT LIMIT: 12



GARDENING & HORTICULTURE

I NEED A PLAN: Garden Fundamentals

Each different section of this program will help you plan your garden. Register for one or all sections.

BOOSTING THE BLOOM: PERENNIAL GARDENS • 2 Tuesdays, Sept. 27 & Oct. 4

Hilary Nichols, garden manager, SEEDS, Inc.

Learn to extend the blooming season and keep your perennial plants dense and perky! This class will focus on perennial border design, plant placement and maintenance strategies so you get the most from your flower garden. Come ready to get your hands dirty as we practice techniques including pinching plants back, cutting back, staking, and when (or when not) to fertilize.

THE MUSICAL GARDEN • 2 Tuesdays, October 11 & 18

Hilary Nichols, garden manager, SEEDS, Inc.

Plants are musical as well as beautiful! Make sound a goal in your planting plan and add the sense of sound into your garden experience. Think of plants as instruments with active plants whispering their songs of stems, leaves and pods shaking in the breeze. Other plants add the musicality of bird songs and the hum of insects by providing food or nesting sites. Learn about musical plants in this class, spending time outdoors in the Gardens, and indoors discussing the best ways to design for the highest musical impact.

EASY STEPS TO A RESILIENT GARDEN • 2 Tuesdays, November 1 & 15

Jan Little, director of education and public programs, Duke Gardens

Plan next year's garden to be more resilient and sustainable. Looking at the garden through nature's lens we will assess your soil, water, drainage, land history and existing plants. After evaluating those conditions each participant will develop a sustainability strategy for their home garden.

CREATE A BIRD-FRIENDLY GARDEN • 2 Tuesdays, February 7 & 14

Lauri Lawson, Niche Gardens

Birds can bring color, life and song to your garden. Lauri will review plants that are favored by both local and migratory songbirds, as well as their other shelter needs. Then you will have the chance to create a plant list suitable for your garden conditions.

TUESDAYS, 6:30-9 PM

LOCATION: DORIS DUKE CENTER

PARTICIPANT LIMIT: 15

FEE PER SESSION: GARDENS MEMBERS \$48; GENERAL PUBLIC \$60.

FEE TO REGISTER FOR MULTIPLE SESSIONS \$43/\$54 PER SESSION.

Qualifies for Home Horticulture Certificate elective credit (5 hours each)

By joining the Mary D.B.T. Semans Society level, you would be supporting 50% of the cost toward this year's spring bulb planting!

Look for this icon to identify NEW classes!

New!

Look for this icon to identify FREE DROP-IN events!

Free!

PAPERMAKING WITH PLANT FIBERS

Gibby Waitzkin, papermaker and sculptor

At one time all paper was handmade, with lovely additions to suit the paper maker or user. Gibby will work with you to explore the art of papermaking, including screen pouring, pulling sheets, composition, embedding botanicals, pulp painting and final preservation. We will work with plant fibers and flowers harvested from Duke Gardens to make your individual creation.

SATURDAY, OCT. 1, 9:30 AM-4:30 PM AND

SUNDAY, OCT. 2, 10 AM-4 PM

LOCATION: GREENHOUSE CLASSROOM

PARTICIPANT LIMIT: 12

FEE: GARDENS MEMBERS \$160; GENERAL PUBLIC \$199. INCLUDES ALL SUPPLIES, EQUIPMENT AND BOTANICALS.

LANDSCAPE PLANTS FOR NORTH CAROLINA GARDENS: Fall and Winter

Jan Little, director of education and public programs, Duke Gardens

Expand your palette of plants with information from this class. Each season this class covers another group of approximately 60 plants suitable for North Carolina gardens. You will learn identification skills and design use, and understand the culture of each plant. The fall program focuses on plants that shine in autumn and late-blooming perennial flowers. Winter introduces plant silhouettes and evergreens. Each student receives a digital portfolio of plant photos. Class time is primarily outdoors.

FALL SESSION: 4 WEDNESDAYS, OCT. 12-NOV. 2, 4-6 PM

WINTER SESSION: 3 WEDNESDAYS, FEB. 22-MARCH 8, 3:30-6 PM

PARTICIPANT LIMIT: 15

FEE PER SESSION: GARDENS MEMBERS \$90; GENERAL PUBLIC \$110

Qualifies for Home Horticulture Certificate required course

PRUNING YOUNG TREES FOR STRUCTURE AND HEALTH

Bryan Lowrance, horticulturist and arborist, assistant local manager, Bartlett Tree Experts

The start of a tree's life has a large impact on its long-term health and stability. Bryan will help you look at the architecture of a young tree from tip of branch to root collar. You will learn to evaluate branching patterns and decide upon appropriate pruning to minimize weak branching and maximize the tree's strength and health.

SATURDAY, OCT. 22, 9:30 AM-12:30 PM

LOCATION: DORIS DUKE CENTER

PARTICIPANT LIMIT: 15

FEE: GARDENS MEMBERS \$30; GENERAL PUBLIC \$38

Qualifies for Horticulture Certificate elective course credit (3 hours)

GARDENING & HORTICULTURE

JOIN US FOR A GARDEN-THEMED TOUR OF RICHMOND, VIRGINIA, THIS OCTOBER

New!

We begin our visit at Lewis Ginter Botanical Garden with a guided tour of this historic 50-acre property of spectacular gardens, including a classical domed Conservatory. Enjoy lunch in a semi-private room, a guided tour, and independent time to re-visit your favorite garden locations.

In late afternoon we move to the Linden Inn Hotel, made up from seven renovated historic row houses, featuring 12' ceilings, historic charm and contemporary amenities, with rooms opening to a garden veranda. Check in for the night, get settled and enjoy high tea in a private room reserved just for us. Friday dinner is on your own; list of restaurants within walking distance provided.

Saturday morning breakfast is provided. Then we visit Maymont and take a step back to the Victorian era. We tour the opulent 33 room mansion of James Henry and Sallie May Dooley, a spectacular example of the Gilded Age. Afterward, a staff horticulturist accompanies us on a tour of the formal Italian garden, the Japanese Garden, herb garden, and Arboretum.

We lunch at the Virginia Museum of Fine Arts and then enjoy the E. Claiborne and Lora Robins Sculpture Garden before boarding the bus for return to Durham. We arrive back at Duke Gardens no later than 6 pm.

FRIDAY & SATURDAY, OCT. 28 & 29, DEPARTING AT 8 AM, FRIDAY, RETURNING BY 6 PM, SATURDAY.

PARTICIPATION LIMIT: 28

FEE: GARDENS MEMBERS PRIVATE ROOM \$380; GENERAL PUBLIC PRIVATE ROOM \$480

GARDENS MEMBERS SHARED ROOM (2 BEDS) \$330; GENERAL PUBLIC \$415

FEES INCLUDE ALL TRANSPORTATION, SNACKS, MEALS AS NOTED, LODGING, ENTRY FEES

AND TOUR FEES. ALL PARTICIPANTS MUST COMPLETE AND SUBMIT A PARTICIPATION AGREEMENT WITH DUKE UNIVERSITY.



Look for this icon to identify NEW classes!

New!

Look for this icon to identify FREE DROP-IN events!

Free!



GARDENING 101

Learn how to open and prepare a bed for planting, basic soil improvement strategies, how to select plants, and planting skills. Class will work in the Charlotte Brody Discovery Garden to see theory in practice.

2 SATURDAYS, OCT. 29 & NOV. 5, 9 AM-NOON

PARTICIPANT LIMIT: 15

LOCATION: DORIS DUKE CENTER

FEE: GARDENS MEMBERS \$70; GENERAL PUBLIC \$90

Qualifies for Home Horticulture Certificate required course

ROUND BASKET WITH CHEROKEE WHEEL EMBELLISHMENT

Lu Howard, basket weaver

Learn to create your own basket with Lu's guidance. Everyone will work on the same 8-inch diameter by 7-inch tall basket with cherry wood embellishment in the traditional Cherokee Wheel pattern. At the end of the day you will have a basket to take home and enjoy. Please dress to get messy, bring an old towel and an awl or a narrow flat blade screwdriver if you have one. Class fee includes all other supplies and equipment.

Lu is well known at the Gardens for her lovely basketry; learn from a master!

SATURDAY, NOV. 5, 10 AM-4 PM

PARTICIPANT LIMIT: 12

LOCATION: DORIS DUKE CENTER

FEE: GARDENS MEMBERS \$40; GENERAL PUBLIC \$50

GARDENING & HORTICULTURE

FALL HARVEST TABLE ARRANGEMENT

Beth Hall, plant records manager, Duke Gardens

Decorate your Thanksgiving tables with a beautiful fall harvest arrangement. Beth will demonstrate how to fashion a vase from pumpkins or other gourds and fill it with the colors of autumn in flowers, foliage, berries and pods for a table centerpiece. Each participant will then select gourds to create their own centerpieces to take home. Please bring a pair of hand pruners and any embellishments you would like to include.

MONDAY, NOV. 21, 3-5 PM • LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 12 • FEE: GARDENS MEMBERS \$55; GENERAL PUBLIC \$65

HOLIDAY GREENERY

Beth Hall, plant records manager, and Michelle Rawlins, horticulturist, Duke Gardens

Make your own fragrant holiday display and bring nature indoors. Beth and Michelle will each create several evergreen wreaths or swags to demonstrate tips and techniques for turning greenery, colorful stems, berries and pods into scented holiday displays for your home. Each participant will then produce his or her own holiday wreath or swag to hang on a door or display on a mantel or table. All plant materials and ribbon will be supplied. Please bring a pair of hand pruners and any embellishments you would like to include.

SECTION A: FRIDAY, DEC. 9, 6-8 PM

SECTION B: FAMILY SESSION, SATURDAY, DEC. 10, 10 AM-NOON, AGES 8 AND UP WITH ADULT

SECTION C: SATURDAY, DEC. 10, 2-4 PM

PARTICIPANT LIMIT: 12 PER SECTION

LOCATION: DORIS DUKE CENTER

FEE PER SECTION: GARDENS MEMBERS \$55; GENERAL PUBLIC \$65



Look for this icon to identify NEW classes!

New!

Look for this icon to identify FREE DROP-IN events!

Free!

DESIGN STRATEGIES FOR AN ENGLISH GARDEN

Annabel Renwick, horticulturist, Duke Gardens

This workshop will begin with an outline of strategies and design elements that may be adapted from authentic English gardens into North Carolina gardens. Then you will have the opportunity to sketch out the basics of a plan for your landscape. The devices of definition, open ground and mixed borders will be refined with discussions of plant palette, the influence of light on color, and right plant/right place approaches. Participants should plan to bring a drawing of the site they want to develop. No site should be larger than 75 x 75 feet.

4 WEDNESDAYS, JAN. 25-FEB. 15, 6:30-9 PM

LOCATION: DORIS DUKE CENTER

PARTICIPANT LIMIT: 15

FEE: GARDENS MEMBERS \$95; GENERAL PUBLIC \$115

Qualifies for Home Horticulture Certificate elective credit (10 hours)

BASIC BOTANY AND PLANT GROWTH

Alec Motten, associate professor, Duke University Department of Biology

How does a plant grow? How does it manage water and nutrients? What factors influence the production of flowers and fruits? This course will explore these questions and more using a combination of lecture and hands-on approaches. Previous participants have commented that Alec's enthusiasm and skillful instruction make the topic come alive.

4 TUESDAYS, FEB. 21-MARCH 14, 6-9 PM

PARTICIPANT LIMIT: 15

FEE: GARDENS MEMBERS \$120; GENERAL PUBLIC \$150

Qualifies as a Home Horticulture Certificate required course

CARING FOR YOUR LANDSCAPE

Suddenly the landscape is planted and you are faced with garden maintenance! In this class we will take you through the steps of establishing a new landscape, watering, plant staking and plants' nutritional needs. Then, we'll consider long-term maintenance tasks, including pruning, weed control, fertilizing and pest control.

3 SATURDAYS, FEB 18-MARCH 4, 9:30-11:30 AM

LOCATION: GREENHOUSE CLASSROOM

PARTICIPANT LIMIT: 15

FEE: GARDENS MEMBERS \$70; GENERAL PUBLIC \$90

Qualifies for Home Horticulture Certificate required course

Your support at the Pergola Society level would go towards one month of general care to the trees in Duke Gardens!

DURHAM GARDEN FORUM

An informal group independent of Duke Gardens, the forum meets once a month to enrich its members' gardening knowledge and skill. Sponsored in partnership with the N.C. Cooperative Extension: Durham County Center

ALL THE WORLD'S A MUSHROOM: THE LARGEST ORGANISM ON EARTH • September 20

Cheralyn Schmidt, area agent, agriculture – horticulture, North Carolina Cooperative Extension, Durham County Center

Little did you know that Fungus is Humongous! Cheralyn will take us on a journey to understand the role of fungi in nature and discuss the delicious culinary mushrooms available in our region.

WILD AND NATIVE EDIBLE PLANTS • October 18

Marc Williams, executive director, Plants and Healers International

The earth has fed people and other animals as long as we have existed. But most of us do not connect the 'stuff' that grows outdoors (beyond farms) with our dinner tables. Marc will take us on a whirlwind tour of edible plants in our own back yards.

GARDENING UNDER FUTURE WEATHER CONDITIONS • November 15

Ryan Boyles, director, State Climate Office of North Carolina

Climate change predictions are now becoming possible at community, or local scales. But how do we address and adapt to these? Ryan Boyles will talk about the science behind climate change projections and how gardeners can take steps today to adapt for the future.

CONSERVING ESSENTIAL WILDLIFE HABITAT • December 13

Laura Stroud, conservation and stewardship associate, Triangle Land Conservancy

We have all heard the statistics—one of every three bites we take are dependent upon a pollinator. Laura joins us tonight to talk about where wildlife and pollinators live in our communities and how we can help them thrive. Hear about conservation efforts in the Triangle and how essential preserves and green corridors are to our health and wellbeing.

AN EMERALD GARDEN OF MOSS • January 17

Annie Martin, Mossin' Annie, author and moss gardener

Moss adds a luxurious, year-round, green to our gardens, and "Mossin' Annie" is an expert. Join us to learn more about moss and see inspirational moss gardens from around the world. Annie, a North Carolina native, will cover botanical information, planting and maintenance, as well as discuss legitimate sources for moss. Annie's book "The Magical World of Moss Gardening" will be available to purchase and get signed.

ERGONOMIC GARDENING AND TOOLS • February 21

John Harrelson and Charles Murphy, Durham County master gardeners

Gardening is the number one pastime in the U.S. More than 400,000 outdoor garden tool-related injuries are treated in emergency rooms each year. Master gardeners John and Charles discuss ways to protect yourself from potential gardening hazards.

TUESDAYS, 6:30-8 PM • LOCATION: DORIS DUKE CENTER
LECTURE FEE: FORUM MEMBERS FREE WITH \$25 ANNUAL MEMBERSHIP.
\$10 PER MEETING FOR NON-MEMBERS, PAYABLE TO DURHAM GARDEN FORUM.
*For membership information, please email durhamgardenforum@gmail.com.
No pre-registration necessary. Parking is free after 5 pm.*

EXTENSION GARDENER SERIES

EXTENSION GARDENER SERIES with Durham County Master Gardeners

Sponsored in partnership with the N.C. Cooperative Extension Service: Durham County Center

LOCATION: DORIS DUKE CENTER

Free events, but registration is required at 919-668-1707. No parking fees after 5 pm.

GETTING STARTED: VEGETABLE GARDENING

Thursday, Nov. 3, 6:30-8 PM

Charles Murphy, Durham County Extension master gardener

Free!

Get up-to-date information about choosing a garden site, soil testing and amendments, planting guides, and all around care and feeding of a successful vegetable garden. Whether you are new to gardening, new to Durham gardening, or re-starting a garden, this is the information you need to succeed.

CARRYING ON: GARDEN MAINTENANCE

THURSDAY, FEB. 23, 2017, 6:30-8 PM

Kit Flynn, Durham County Extension master gardener

Free!

To garden is to weed: There is no other way around weeding, but there are tricks to the trade, and it is possible to cut down on the number of weeds without resorting to chemicals. Other important garden maintenance tasks, such as dead heading, dividing, and light pruning, will also be discussed.

BUY HEALTHY PLANTS AND PLANT THEM WELL

THURSDAY, MARCH 2, 2017, 6:30-8 PM

Chris Apple, Durham County Extension master gardener

Free!

Healthy plants stand a better chance of thriving in your garden. This presentation will review what you should look for when purchasing and planting plants. Chris will discuss plant sources, how to evaluate a plant, how to correctly plant a tree, shrub, groundcover or perennial and then what is necessary to establish a plant.

PLANT INFORMATION BOOTH

Having trouble with a plant, pest or pathogen? The Master Gardener Volunteers will be in Duke Gardens Wednesday and Saturday mornings in September and October to answer all your questions about plants, gardening, insect pests or disease. Please see a complete schedule and more information at durham.ces.ncsu.edu.

WEDNESDAYS IN THE TERRACE GARDENS: SEPT. 7 & 21 AND OCT. 5 & 19, 10 AM-1 PM

TUESDAYS AND SATURDAYS IN THE CHARLOTTE BRODY DISCOVERY GARDEN: SEPT. 3, 6, 27 AND OCT. 4, 8, 18, 22, 10 AM-1 PM



HOME HORTICULTURE

Certificate Program

Each garden is a unique combination of site, soil, climate and the gardener who creates it. The Home Horticulture Certificate gives you the knowledge and skill to select plants successfully, and to develop, grow and maintain your home landscape.

The curriculum assists you in mastering the gardening techniques best suited for North Carolina gardens through lectures, demonstrations, field experiences and projects. The classes focused on native plants and systems will assist you in sustainable gardening. Enjoy learning from local experts and sharing your experiences with other gardeners.

You do not have to be enrolled in a certificate program to take a class. Everyone is welcome in certificate courses.

Participants already pursuing the certificate should continue to complete the requirements in place when they began. For people just beginning the certificate program, please see the requirements listed below.

FULL LISTING OF REQUIRED COURSES:

For current programs scheduled, please see the class listings. Some required courses are offered seasonally.

- Landscape Plants for North Carolina Gardens: four seasonal courses
– spring, summer, fall and winter
- Basic Botany and Plant Growth
- Gardening 101
- Caring for Your Landscape

ELECTIVE COURSES:

These courses change seasonally, and 4.0 class hours of electives are the minimum required to complete your certificate. Electives are created in response to student requests, allowing students to pursue their specific interests.

ELECTIVE TOPICS MAY INCLUDE:

- Landscape design
- Sustainable gardening
- Container gardening
- Hardscape installation
- Fruits and vegetables
- Landscapes for life
- Zoom In series

For more information or to enroll in a class or certificate program, please call the registrar's office at 919-668-1707 or email gardenseducation@duke.edu.



NATURE PHOTOGRAPHY

Certificate Program

Nature photographers possess a unique blend of technical knowledge and artistic vision. Their skills illustrate nature and build appreciation and understanding of the natural world for us all. To share your love of nature—with an ability to capture it in an image—is exhilarating. This certificate program helps refine and expand your knowledge of equipment, processes, composition and methods while increasing your skill and awareness of the beauty of our natural world.

Photographers of all experience levels, from beginner to advanced, using any type of photo equipment (film or digital), are encouraged to enroll in this program.

You do not have to be enrolled in a certificate program to take a class. Everyone is welcome in certificate courses.

Participants already pursuing the certificate should continue to complete the requirements in place when they began. For people just beginning the certificate program, please see the requirements listed below.

FULL LISTING OF REQUIRED COURSES:

For current programs scheduled, please see the class listings.

- Introduction to Nature Photography / Introduction to Digital Photography
- Learning to See in Nature
- Improving Photo Quality
- Photographing Plants
- Three of the required courses from the Home Horticulture Certificate program

ELECTIVE COURSES:

These courses change seasonally, and 30 class hours of electives are the minimum required to complete your certificate. Electives are created in response to student requests, allowing students to pursue their specific interests.

ELECTIVE TOPICS MAY INCLUDE:

- Close-up photography
- Photoshop for nature photographers
- Night photography
- Using light effectively
- Composition skills

Take a look at our membership information on pages 6-7 and learn how you and your family can save 20% on our Education Programs today!

NATURE PHOTOGRAPHY CLASSES

THE 12 ELEMENTS OF BETTER IMAGE MAKING

Paul Wingle, master photography craftsman, Paul Wingle Photography

Every successful photograph depends upon a range of strategies. Good photographers use these intuitively – great photographers use them intentionally! Each weekend session will focus on several of these techniques so you can thoroughly explore each element and benefit from seeing how other participants interpret the same technique. Join Paul for one or all three sessions of this class to review the elements that create powerful images.

• **SECTION A:** SATURDAY, OCT. 15, 9:30 AM-4 PM, AND SUNDAY, OCT. 16, 9:30 AM-2:30 PM. ELEMENTS INCLUDE IMPACT, CREATIVITY, TECHNICAL EXCELLENCE, AND SUBJECT MATTER.
• **SECTION B:** SATURDAY, NOV. 12, 9:30 AM-4 PM, AND SUNDAY, NOV. 13, 9:30 AM-2:30 PM. ELEMENTS INCLUDE COMPOSITION, LINES, SHAPES, FRAMING DEVICES, LIGHTING AND STYLE.
• **SECTION C:** SATURDAY, DEC. 3, 9:30 AM-4 PM, AND SUNDAY, DEC. 4, 9:30 AM-2:30 PM. ELEMENTS INCLUDE COLOR, COLOR BALANCE, VALUE, SPACE, CENTER OF INTEREST AND PRINT PRESENTATION.
LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 12 • FEE PER SECTION: GARDENS MEMBERS \$175; GENERAL PUBLIC \$225
FEE TO SIGN UP FOR MULTIPLE SESSIONS \$160/\$210 PER SESSION.
Each section qualifies for credit as an Nature Photography Certificate elective course (11.5 hours each)

THE ART OF STORYTELLING

Paul Wingle, master photography craftsman, Paul Wingle Photography

Photographs communicate a variety of stories to the viewer. In this class you will learn to reflect upon what you are trying to convey in an image. What would make the story more evocative. How could it speak more loudly? Through assignments and referring back to the twelve elements, learn to create images that tell a strong story and are more than just a picture.

SATURDAY, JAN. 21, 9:30-4 PM AND SUNDAY, JAN. 22, 9:30 AM-2:30 PM.
LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 12 • FEE : GARDENS MEMBERS \$175; GENERAL PUBLIC \$225
Qualifies for credit as an Nature Photography Certificate elective course (11.5 hours each)

MEET YOUR NEW DIGITAL CAMERA

Melissa Southern, nature photographer

Learn about all the bells and whistles of your new camera while improving your basic photographic skills. Melissa will work with you to decipher all the functions and menus available on your camera and then touch upon compositional skills. Please bring your camera and manual to each session. All digital cameras, from point and shoot to SLRs, are welcome. Class time will be spent indoors covering technique and functions, followed by outdoor field sessions to practice your new skills. Examples of Melissa's work may be seen at melissasouthern.com.

FRIDAY, JAN. 20, 7-8:30 PM; SATURDAY, JAN. 21, 9:30 AM-4 PM;
SUNDAY, JAN.22, 9:30 AM-NOON. • LOCATION: DORIS DUKE CENTER
PARTICIPANT LIMIT: 15 • FEE: GARDENS MEMBERS \$120; GENERAL PUBLIC \$150
Qualifies for Nature Photography Certificate required course



JAPANESE TEA GATHERINGS

TRADITIONAL JAPANESE TEA GATHERINGS

Chizuko Sueyoshi with members of the Japanese Tea Practitioners of Durham

Join us for a moment of respite in the Duke Gardens teahouse, where you will experience the warmth of a traditional Japanese tea gathering. Tea guests meet at the Doris Duke Center to be escorted to the teahouse for these intimate gatherings. Daytime teas are open for children age 6 and older with an accompanying adult, at the family rate. Participant limit: 10

SATURDAY, OCT. 15: MOON-VIEWING TEA, 6:45-8:15 PM, 1 SEATING ONLY

SATURDAY, OCT. 29: DANCING LEAVES TEA, 10:45 AM AND 1 PM SEATINGS

SATURDAY, FEB. 25: FIRST VOICE OF SPRING TEA, 10:45 AM AND 1 PM SEATINGS

LOCATION: MEET AT THE DORIS DUKE CENTER

FEE: GARDENS MEMBERS \$35; GENERAL PUBLIC \$45; FAMILY RATE \$45 PER ADULT/CHILD

ADDITIONAL CHILDREN \$15 EACH

Pre-registration required (parking pass included)



Gardens PARTNERS

Sarah P. Duke Gardens is pleased to welcome the following horticulture partners. These groups are independent of the Gardens but welcome our members and visitors to join them in learning more about horticulture. No registration required.

N.C. COOPERATIVE EXTENSION SERVICE: DURHAM COUNTY CENTER

Please see lecture schedule on page 33.

The Durham County Extension Master Gardener Volunteers will be in the Gardens several days of the week to answer all your questions about plants, gardening, insect pests or disease. Please go to durham.ces.ncsu.edu for a complete schedule.

DURHAM PHOTOGRAPHY CLUB AT DUKE GARDENS

Meets on the 3rd Monday of each month, 6:30-8 pm. Please find more information on the club's Facebook page by entering its name into Facebook's search box.

TRIANGLE ORCHID SOCIETY

The Triangle Orchid Society conducts its monthly meeting at the Doris Duke Center on the 2nd Monday of each month. Please go to triangleorchidsociety.org for more information.

DURHAM COUNTY BEEKEEPERS

Meets the 3rd Monday of each month, 6:30-9 pm, at the Doris Duke Center.

SARAH P. DUKE IKEBANA INTERNATIONAL CHAPTER #264

For information, contact Lu Howard, chapter president, at llhoward@nc.rr.com.

DURHAM GARDEN FORUM

Please see meeting schedule and topics on page 32.

YOUtopia

Sarah P. Duke Gardens is pleased to announce our participation in YOUtopia, a program that assists America's public gardens in reducing their climate impact. Created by the American Public Gardens Association and ecoAmerica, this program communicates the goals and successes of partnering public gardens. Watch for additional information at Duke Gardens about the increased sustainability of our gardens.



LET'S MOVE!

"Let's Move!" is a comprehensive initiative launched by First Lady Michelle Obama. It is dedicated to solving the problem of obesity within a generation, so that children born today will grow up healthier and able to pursue their dreams. Working with parents, caregivers, schools, public officials and communities, Let's Move! is about putting children on the path to a healthy future during their earliest months and years. Let's Move! Museums & Gardens will focus on interactive exhibits, after-school and summer programming and food service that help young people to make healthy food choices and be physically active.



REGISTRATION FORM

Registrant name

Address

City

State

Zip

Daytime phone

Cell phone

Email

REGISTRATION POLICY: Please pre-register for all programs and complete any fee payment at that time. Registrations are accepted on a first come, first served basis, no registration is complete without payment, and program space will be allocated on a first paid, first reserved basis. *To register please call 919-668-1707 or email gardenseducation@duke.edu*

CANCELLATION POLICY: You may cancel your enrollment and receive a refund of your fee up to a week before the scheduled start date of a class. Any classes canceled by Duke Gardens will result in a complete refund. Please note that camps require further advance notice for cancellations.

WEATHER POLICY: Occasionally weather disrupts a schedule; last-minute changes will be noted on the voicemail message at 919-668-1707.

COURSE NAME	DATES	FEE
_____	_____	_____
_____	_____	_____
_____	_____	_____
		TOTAL \$

FRIENDS OF DUKE GARDENS ENROLLMENT

To qualify for membership discounts and other benefits, please send a separate check payable to Duke Gardens.

Check one of the boxes below:

- | | |
|--|--|
| <input type="checkbox"/> Duke student | <input type="checkbox"/> Pergola Society \$1,000 |
| <input type="checkbox"/> Individual \$50 | <input type="checkbox"/> Directors Society \$2,500 |
| <input type="checkbox"/> Dual (spouses/partners) \$75 | <input type="checkbox"/> Mary Duke Biddle Society \$5,000 |
| <input type="checkbox"/> Family (includes children under age 18) \$100 | <input type="checkbox"/> Mary D. B. T. Semans Society \$10,000 |
| <input type="checkbox"/> Terraces Society \$250 | <input type="checkbox"/> Corporate Friends \$5,000 |
| <input type="checkbox"/> Iris Society \$500 | |



SARAH P. DUKE GARDENS
DUKE UNIVERSITY
Box 90341
Durham, NC | 27708-0341

Non-Profit Org
US POSTAGE
PAID
Durham, NC
Permit No. 60

gardens.duke.edu

Sarah P. Duke Gardens creates and nurtures an environment in the heart of Duke University for learning, inspiration and enjoyment through excellence in horticulture.