Flora of Virginia Published

UNC Herbarium Director Alan Weakley has published a 1554-page book on the plants of Virginia with two Virginia colleagues. A tool for botanical and ecological research, education, and conservation, the book is the first manual of the flora of Virginia published since 1762. Eleven years in the making, this manual will be appreciated by all plant enthusiasts. Read more about it on page 12.

Healing and Hope Receives Grants

At the end of 2012, we learned that our Healing and Hope Through Science Program (HHTS) had been awarded a Student Science Enrichment Program grant from the Burroughs Wellcome Fund. The $121,000 grant will support the program’s efforts over a period of three years. HHTS provides hospitalized children with a connection to the natural world via hands-on natural science activities. “We are so excited because this grant will enable us to provide more empowering education and engaging activities to pediatric patients at UNC Children’s Hospital,” says Katie Stoudemire, program coordinator for HHTS. “These funds will help us nurture an interest in science and science careers while helping children cope with hospitalization.”

HHTS also received a $25,000 Ribbon of Hope grant from the North Carolina GlaxoSmithKline Foundation. These funds will enable HHTS to form a partnership with NC State University’s College of Design to create a unique garden-on-wheels to be used at the University of North Carolina Children’s Hospital.

Let’s Do It Again!

The Carolina Moonlight Gala 2012 was so much fun that planning is well underway for our second Carolina Moonlight Gala: May 18, 2013, 7–11 pm. Gala Committee and BGF Board members are busy rounding up wonderful items for the online silent auction that will again go live for your browsing and bidding pleasure two weeks prior to the event. Plus, our 2013 Gala will feature an exciting live auction at the event. Among auction offerings, we expect such prizes as natural history adventures, original art and photographs, sculpture, regional trips, plants and more plants, gift certificates for restaurants, and much more. To whet your bidding appetite, go to ncbg.unc.edu/carolinamoonlight/ where you can link to and browse last year’s auction.

The May evening under a waxing Carolina moon will feature music, fine food and drink, fascinating conversation with like-minded folks and, most important, the opportunity to support your favorite local botanical garden! The reason for all of this fun and excitement? Simply put, it is to raise unrestricted funds for the Garden’s many and ever-increasing programs. Consistent with the Garden’s conservation mission, the Gala’s subtheme is Celebrating Sustainable Living. Your auction participation and attendance will be your personal green celebration in support of the North Carolina Botanical Garden.

Stay in touch by bookmarking ncbg.unc.edu/carolinamoonlight/ so you can return there easily as we post information on the Gala. Tickets and a link to the online silent auction will be available there too. Celebrate Sustainable Living: Attend the 2013 Carolina Moonlight Gala!

Your 2013 Seed List is included inside this newsletter!
I n November, I traveled to Claremont McKenna College in California for my first ever invitation to speak at an English Department. I was to present “Turn the Poet Out of Doors: A Natural History of Robert Frost,” a talk in which I celebrate the scientific interests and accurate field observations of the famous poet.*

The trip to Claremont was a thrill, and it involved participation in two English classes (the first I’d attended since undergraduate days!). One of those classes was led by writer Jamaica Kincaid and the topic was “gardens in literature.” Ms. Kincaid asked me to outline the characteristics and themes of modern botanical gardens. I had earlier been inspired by an article that appeared in *The New York Times* several years ago stating that botanical gardens are “not just about flowers anymore.” The world around gardens is changing, and so gardens are evolving. Plants, indeed all of nature, under threat; climate warming; sustainability issues; needs for healthier lifestyles and diets; a deeper understanding of the importance of childhood experiences in nature—all of these issues concern public gardens today. As director, I feel the pressure to define our role, perhaps never so much as in these tough budget times (and many thanks for your membership and continued support!)

For Ms. Kincaid’s class, I developed a list of ten themes. I imagine these as overlapping spheres that define today’s botanical gardens. Not all gardens have each one in equal strength.

1. **Science:** the adjective (“botanical”) in the term botanical garden underscores that everything else we do is secured by objective knowledge and seeks to increase that knowledge—in horticulture, taxonomy, ecology, and conservation.

2. **Horticulture:** the traditional role in growing and enhancing a green world.

3. **Food:** community gardens, such as the Carolina Campus Community Garden, are now a major way that botanical gardens teach and demonstrate the desirability of a connection to food supply and healthy eating and lifestyle.

4. **Sustainability:** demonstrating how people must interact with their environments, from local to global scales.

5. **Conservation:** protecting and restoring nature itself, including support for the interconnections of plants and animals, and using garden expertise to save critically endangered species.

6. **Nature:** nature trails and wild nature, untended or tended.

7. **Diversity:** variation in species, forms, colors, seasons, uses, experiences, people.

8. **Community:** a project that people do together to build a sense of community and public good.

9. **Art and Experience:** beautiful places that provide respite, exercise, and inspiration for the spirit and the arts.

10. **Education:** teaching people of all ages, backgrounds, and abilities. (I put Education last only because it reaches across the other nine spheres.)

These ten themes collectively show that botanical gardens are not walled islands, as they may have been in an earlier age. They also do not serve only that part of society that is interested in, educated about, and otherwise possessing enough resources to be invested in fine horticulture. Today botanical gardens have a bigger role to play in making the world a more diverse, sustainable, and educated place. As Aldo Leopold wrote over six decades ago, “our tools are better than we are and grow faster than we do. They suffice to crack the atom, to command the tides. But they do not suffice for the oldest task in human history: to live on a piece of land without spoiling it.” Leopold was a conservationist, a proponent of ecological restoration, and a gardener, and the work he challenged us to undertake is not yet complete. Botanical gardens are at the center of Leopold’s challenge, spanning both wild nature and human-tended places.**

My ten spheres are a kind of classification and can also be seen as a grading scheme for botanical gardens. I hope you will recognize aspects of the North Carolina Botanical Garden in each of the ten—and that you will grade us highly, while also helping us to achieve even higher marks. 

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*I give this same talk at the Garden in March; see p. 5

**See p. 7 for an opportunity to attend the first showing, in our area, of “Green Fire,” a celebration of Leopold’s contributions, and to participate in other Leopold anniversary activities.

*Note: Photo of Coker Arboretum, above, by Janet Liloia.*
What’s New in the Garden Shop?…

H ave you visited the Garden Shop lately? Be prepared for your imagination to take flight: a delightful selection of nature puppets has arrived. From birds to reptiles to mammals, you won’t be able to resist playing with these plush critters. Pick up an accompanying book while you are here. Or some of our new magnifiers to explore the natural world around you…up close!

Wildflower of the Year 2013 shirts have arrived (modeled here by student Caroline Pate). Limited stock. Don’t miss out—get yours now! Details about *Ceanothus americanus*, New Jersey-tea, are in the 2013 Seed List, enclosed in this newsletter.

The Making of a Pollinator Garden

O n November 14, students in the Young Ecoscapers environmental education program celebrated the installation of a pollinator garden they designed and created under the guidance of Garden educators Grant Parkins and Elisha Taylor. The pollinator garden is a new section of the Children’s Wonder Garden and will provide visitors an opportunity to learn about the role of native pollinators and plants in our environment.

Young Ecoscapers offered children a unique opportunity to learn about the ecology and value of native habitat and then apply their knowledge to create an eco-friendly landscape from beginning to end. Seventeen home-educated children between the ages of 9 and 12 participated in the two-part, 12-session course. Students were leaders in every aspect of the creation of the garden, learning about pollination, creating a field guide to native pollinators and plants, analyzing site conditions, selecting and propagating plants, designing and installing pathways and habitat features, and planting more than 250 plants and 60,000 seeds from 73 species.

Visit the growing pollinator garden this spring: a garden designed by kids, for kids!

(Note: the Garden received a $1,000 GreenWorks! grant from Project Learning Tree and a $250 Lorrie Otto Seeds for Education Fund grant from Wild Ones to purchase native plants and seed.)
The Carbon Equation
by Johnny Randall, Director of Conservation Programs

Climate change is upon us and our government and citizenry seem begrudgingly reluctant to move toward a reduction in greenhouse gas emissions. Vehicle emissions and our car-dependent society haven’t changed much since the 1980s. Energy-efficient building practices are well ahead of vehicles, but nearly three-fourths of our power plants are fossil fuel based. Real improvements are on the horizon for more fuel-efficient vehicles and alternative energy sources, but it will be a long time before significant atmospheric CO$_2$ reductions occur even with new standards and technologies.

On the flip side, energy efficiency is a long-standing practice for many who recognize the importance of reducing fossil fuel abuse. And I count the Garden as a leader in this arena, both historically and in our continuing Conservation Garden practices. Most readers probably know that our Education Center is a shining (Platinum) star in environmental design and energy efficiency, but many might not know that UNC-Chapel Hill has made great strides toward reducing its carbon footprint, to the extent of pledging “carbon neutrality” by 2050 and hiring a greenhouse gas specialist to guide this effort. See climate.unc.edu/ for a comprehensive look at the UNC Climate Action Program.

Becoming carbon neutral doesn’t mean zero emissions, but rather that reduced emissions through renewable energy, alternative transportation, and energy-efficient building practices will be coupled with carbon offsets. And offsets for UNC are principally available through the uptake and sequestration/storage of CO$_2$ by the university’s forested lands!

In an effort to estimate just how much the UNC forested lands contribute to carbon sequestration, a student “Capstone” project was designed to answer this question. Capstone projects are experiential semester-long upper-level undergraduate courses required of all environmental sciences, environmental studies, and environmental health sciences majors, and for sustainability minors.

The “carbon teams” established a total of 80 sample plots in forested areas on the Main Campus (729 acres), the Carolina North Forest (750 acres), and on 743 acres of the Botanical Garden’s 1,000 acres of natural areas. Teams calculated forest carbon storage capacity by estimating tree biomass per plot. Biomass is essentially the total tree bulk (i.e., carbon-based wood) and is determined by measuring tree diameter, height, and spread. Carbon teams then used the i-Tree Eco software program, developed by the U.S. Forest Service, to quantify the carbon storage capacity of all tree species within each plot and then extrapolate to the campus and target forests.

According to UNC Energy Services, campus greenhouse gas emissions (primarily in the form of CO$_2$) were approximately 531,000 metric tons in 2011. From i-Tree the students determined that our campus forests sequestered 6,120 metric tons of this carbon in new woody plant growth (as branches and the most recent growth ring). They also calculated that the total carbon stored in the estimated 748,000 UNC forest trees, based on total biomass, is about 216,000 metric tons. (The complete Capstone project, an interesting read, is available on the Climate Action Program website: climate.unc.edu/GreenhouseGasInventory/EmmissionsBreakdown).

The Capstone report shows that UNC needs to continue greenhouse gas emission reductions and that current UNC forested areas cannot offset emissions at current levels. But let me quickly add that that’s precisely why UNC hired a greenhouse gas specialist, who updates and maintains greenhouse gas emissions data and manages the university climate action plan. (Check out the UNC “Energy Dashboard” itsapps.unc.edu/energy/ that provides real time data on campus-wide energy use, including the Garden’s Education Center!)

The Capstone report also clearly demonstrates the indispensable importance of forested areas and that these need to be protected, properly managed, and increased. It was also nice to see in the report that the largest trees, greatest forest density, and greatest tree species diversity were found on Botanical Garden lands!
Join us for this week of events inspired by spring!

**Springtime on Nature Trail Hill**  
Sunday, March 17; 2:00–4:00 pm  
Explore a Piedmont hardwood forest with Carol Ann McCormick and find signs of spring including our earliest spring wildflowers, such as spring beauties, wild ginger, and trout lily. Easy pace; some steps and uphill walking. Children welcome; please leave pets at home. Fee: $5 per family (free for NCBG members).

**Robert Frost – Full Day of Spring**  
Wednesday, March 20; 7:00–8:00 pm  
We begin the Spring Week Celebration by bringing back a popular presentation by Garden Director Peter White on the natural history of Robert Frost’s poetry. This March marks the 140th anniversary of Frost’s birth. In honor of that, Dr. White combines three threads from his own childhood—his mother’s love of poetry, summers on a Maine lake, and a love of nature. You’ll be introduced to Robert Frost the natural historian, who recognized many species of plants and animals on his daily walks, understood plant families, observed nature in detail, and wrote of the need for wilderness and conservation. **Free, but please register online!**

**Spring in the Garden Walk**  
Saturday, March 23; 10:00–11:00 am  
Join us for a special tour of the North Carolina Botanical Garden. On this 60-minute walk, you will experience spring and the beauty of plants native to North Carolina. Discover a longleaf pine forest, a wet savanna, and a mountain bog in our different Habitat Gardens. Learn about native wildflowers for the home landscape in our Perennial Border, and finish up with a look at some of NC’s most unique plants in our Carnivorous Plant Collection—Venus flytraps, pitcher plants, sundews, native orchids. Tour begins in the Pegg Exhibit Hall of the Education Center. **Free, but please register online!**

**Spring Haiku Workshop**  
Saturday, March 23; 11:30 am–12:30 pm  
Plan your morning at the Garden! After the Spring in the Garden Walk (see above), join the NC Haiku Society (www.nc-haiku.org) for a springtime haiku experience. We’ll begin with simple approaches to writing haiku, then compose haiku-like poems based on words and images from the audience. There is so much more to haiku than the famous 5-7-5 syllable count: come find out what these little poems have to offer! Bring your lunch and picnic after. **Free, but please register online!**

**Sustainable Solutions to Your Landscape Challenges**  
Saturday, March 23; 2:00–4:00 pm  
Is your landscape plan working? Are you challenged by pathways that aren’t functioning as intended? Are your garden beds what you expected, and your plantings healthy and thriving? Often, even a well-conceived plan, once installed, confronts the challenges of real life. Understanding and working with your particular site’s microclimates is key to garden success. Using the new garden spaces of the Education Center as examples, Amanda Mixon, NCBG Curator of the Education Center Gardens provides practical, ecological and maintainable landscape design solutions for the home-owner, emphasizing the importance of the landscape site conditions. Topics covered are appropriate soil-plant combinations, drainage and stormwater issues, and native plant choices. Fee: $40 ($35 NCBG members)

**Signs of Spring Family Hike**  
Saturday, March 23; 1:30–3:00 pm  
Who’s singing in the pond? What’s blooming up from under fallen leaves? Celebrate the Spring Equinox with a leisurely hike through the gardens and trails with Garden Educator Elisha Taylor, searching for signs that the natural world is waking from its winter slumber. We’ll learn some facts and folklore while exploring for frogs, bursting buds, early birds, and other spring surprises. **Parents/caregivers must remain with their child at all times. Dress for the outdoors! Fee, per child: $8 ($6 NCBG members)**

**Bird Walk at Mason Farm**  
Sunday, March 24, 8:00 am  
Join Cynthia Fox, bird expert and owner of Chapel Hill’s Wild Bird Center, for an early morning springtime walk at our Mason Farm Biological Reserve. The 367-acre reserve encompasses a combination of forests and old fields that support approximately 800 species of plants and 216 species of birds. A greater number of different species of animals have been recorded at Mason Farm than in any other comparably-sized area in the entire Piedmont! Participants will learn to recognize birds by song and sight. Bring your binoculars. Meeting place will be confirmed at time of registration. Fee: $10 ($5 NCBG members)

**Eat Wild Spring: Edible Greens**  
Sunday, March 24, 1:30–4:30 pm  
Learn how to make friends and food with the weeds in your home “yarden” as we meet and eat some of the abundant wild edibles of the NC Piedmont. In this hands-on field study for folks of all experience levels, we’ll celebrate the arrival of spring as we wander the Garden in search of common weeds that create delicious wild greens pesto. In the process we’ll cover identification, safe and ethical gathering, preparation, nutrition, and the joy of foraged food. Handout with recipes included. A native of NC with life-long roots in Chatham County, your guide Kim Calhoun joyfully shares the time-honored healing tools of herbalism, wild foods, massage, and yoga through AbunDance Healing Arts. Fee: $40 ($35 NCBG members)**

*more programs on next page . . . “>
Spring Semester Certificate Courses

Full descriptions of these Certificate Courses on our website (ncbg.unc.edu/classes-workshops/) 😊 = No prerequisites—open to all!

**Native Plant Studies**

**Plant Ecology** 😊
Stepp Jeffries, Forest Ecologist
Tuesdays, Feb 12, 19, 26; Mar 5 (field trip); 9:30 am–12:30 pm

**Book Review: On the Origin of Species by Charles Darwin** (Short Course) 😊
Peter White, NCBG Director
Thursday, Feb 7 (incl. weather: Feb 28), 7:00–9:00 pm

**Botany** 😊
Olivia Lenahan, Horticultural Scientist
Saturday, Mar 2, 9, 16, 23; 9:15 am–1:15 pm

**Spring Flora** 😊
Milo Pyne, Plant Ecologist
Saturdays, June 15, 22, July 13, 20; 9:30 am–12:30 pm

**Plant Communities of North Carolina** 😊
Alan Weakley, Director, UNC Herbarium
Tuesdays, Apr 2, 9, 16, 23; 9:00 am–12:00 pm

**Piedmont Savanna Ecology** 😊
Nicki Cagle, Plant Ecologist
Saturdays, Apr 6, 13, 20, 27; 9:15 am–12:15 pm

**Controlling Invasive Plants** (Short Course) 😊
Jeff Stewart, Ecologist
Saturday, Apr 6, 9:30–4:30 pm

**Principals of Conservation Biology**
Peter White, NCBG Director
Mondays, Apr 8, 15, 22, 29, May 6, 13, 20, June 3; 12:00–1:00 pm

**Local Trees** (Short Course) 😊
Stepp Jeffries, Forest Ecologist
Thursdays, May 2, 9; 9:30 am–12:30 pm

**Plant Taxonomy**
Milo Pyne, Plant Ecologist
Fridays, May 3, 10, 17, 24; 1:00–4:00 pm

**Flowering Plant Families**
Olivia Lenahan, Horticultural Scientist
Saturdays, May 4, 11, 18, June 1; 1:00–4:00 pm

**Native Southeastern Medicinal Plants** 😊
Ricky Bratz, Herbalist (Short Course)
Saturday, May 18, 1:30–4:30 pm

**Plant Propagation** (Short Course) 😊
Matt Gocke, NCBG Nursery/Greenhouse Mgr.
Saturday, June 8, 9:30 am–12:30 pm

**Summer Flora** 😊
Milo Pyne, Plant Ecologist
Saturdays, June 15, 22, July 13, 20; 9:30 am–12:30 pm

**Botanical Art & Illustration**

**Portfolio/Graduation Preparation: What You Need to Know** (Short Course) 😊
Emma Skurnick, Professional Artist
Tuesdays, Feb 12, 26 (incl. weather: Monday, Apr 1); 9:30 am–12:30 pm

**Nature Journaling** (Short Course) 😊
Jeannine Reese, Artist
Saturday, Feb 23, 1:00–4:30 pm

**Portfolio/Graduation Preparation: Business Practices for Illustrators** (Short Course) 😊
Emma Skurnick, Professional Artist
Tuesdays May 5, 12, 9:30 am–12:30 pm

**Intermediate Watercolor for Illustrators**
Maryann Roper, Professional Artist
Tuesdays, May 5, 12, 19, 26; 1:00–4:30 pm

**Intermediate Drawing**
Emma Skurnick, Professional Artist
Wednesdays, Mar 6, 13, 20, 27 (incl. weather: Monday, Apr 1); 10:00 am–1:30 pm

**Copperplate Calligraphy—Basic Letter Forms** (Short Course) 😊
Maryann Roper, Professional Artist
Saturday, Mar 14, 1:00–4:30 pm

**Ephemerals** (Short Course) 😊
Linda Koffenberger, Professional Artist
Saturday, June 15; 1:00–4:30 pm

**Earth Partnership for Schools to be Offered in Summer**

The 2013 Earth Partnership for Schools Teacher Institute will be offered July 15–19. Applications for the 2013 workshop are available starting February 1 on the Garden’s website: ncbg.unc.edu/education-for-schools-and-teachers/ For more information, please contact Grant Parkins, Natural Science Educator: parkins@unc.edu, 919-962-2887.
An Aldo Leopold Celebration

Considered by many to be the father of wildlife management and of the U.S. wilderness system, Aldo Leopold was a conservationist, forester, philosopher, educator, writer, and outdoor enthusiast. This spring we are honoring his legacy with several special programs . . .

Book Review: A Sand County Almanac
Thursday, Feb 21, 7:00–9:00 pm  Peter White, NCBG Director
Independently read Aldo Leopold's A Sand County Almanac, considered by the American Nature Study Society to be one of the two most significant environmental books of the 20th Century. Then meet on Feb 21 to discuss Leopold’s “land ethic.” Fee: $30 ($25 NCBG members) [1/4 credit for Certificate in Native Plant Studies.]

Teacher Workshop: Aldo Leopold Education Project
Saturday, Feb 23, 9:00 am–3:00 pm
Robert Hawk, State Coordinator for the Leopold Education Project and Haywood County Cooperative Extension Agent
The Leopold Education Project is an innovative, interdisciplinary educational program based on the classic writings of renowned conservationist, Aldo Leopold. Targeted for Grade 6 and above, the curriculum teaches about humanity’s ties to the natural world. This workshop provides materials and techniques for teaching outdoors, where students can be stimulated by authentic learning experiences. Appropriate for Grades 5–12 educators (science, language arts, math, art, history), non-formal educators, naturalists, interpreters, natural resource professionals, 4-H & Scout leaders, conservation leaders, and others. Fee: $35  [Criteria I Instructional Workshop for North Carolina EE Certification]

Nature Journaling
Saturday, Feb 23, 12:30–3:30 pm  Jeannine Reese, Artist
Aldo Leopold was a skilled nature writer, and winter is the perfect time to start a nature journal, when thoughts are more reflective and details of nature are not so showy/complicated. No art or writing experience is necessary for this workshop; all levels of ability are welcome. Learn simple techniques and materials for starting a nature journal as a way to record thoughts, ideas, garden notes, and everyday wonders. Bring a blank journal (unlined preferred) and an attitude of discovery. Fee: $40 ($35 NCBG members) [1/4 credit for the both Certificates]

At the Movies: “Green Fire—Aldo Leopold and a Land Ethic for Our Time”
Saturday, Feb 23, 3:30–4:45 pm
Join us for this viewing of an extraordinary film that highlights Aldo Leopold’s extraordinary career, tracing how he shaped and influenced the modern environmental movement. Leopold remains relevant today, inspiring projects all over the country that connect people and land. Popcorn and drinks provided! Stanley Temple, Senior Fellow and Science Advisor, Aldo Leopold Foundation, and Beers-Bascom Professor Emeritus in Conservation at the University of Wisconsin–Madison will lead the discussion after the film. Fee: $10 ($5 NCBG members)

Leopold Bench Building Workshop
Sunday, Feb 24, 2:00–4:00 pm  Jim Fickle, NCBG Volunteer
In 1935, Aldo Leopold and his family initiated their own ecological restoration experiment on a worn-out farm along the Wisconsin River outside of Baraboo, WI. There he used scrap wood or whatever materials he had on hand to build a series of benches. Build your own Leopold Bench to take home! This simple, yet classic bench works in any landscape. Wood and hardware provided, and in the spirit of Leopold, if possible we will use reclaimed wood. Tools will be provided, but if you have a portable drill/screwdriver, please bring it along. Leopold’s legacy will live on in your garden and inspire you to see the natural world “as a community to which we belong.” $35 ($30 NCBG members)

Walks/ Hikes
See description of these walks & hikes on our website: ncbg.unc.edu/nature-hikes

Springtime on Nature Trail Hill
Sunday, March 17, 2:00–4:00 pm  Carol Ann McCormick, Botanist
Fee $5 (Free for NCBG members), description p. 5

Mother’s Day Walk at Mason Farm
Sunday, May 12, 2:00–4:30 pm  Ed Harrison, Naturalist
Fee $10 ($5 NCBG members)

Penny’s Bend Wild Blue Indigo Hike
May 18, 9:30 am–1:00 pm  Ed Harrison, Naturalist
Fee: $10 ($5 NCBG members)

Mindful Movement

Yoga at the Garden
Saturdays, April 13, 20, 27, May 4; 10–11 am  Dani Strauss, Yoga Instructor
A 4-week experience. Enjoy the benefits of an all-levels yoga practice emphasizing meditation, breathing, and movement in a tranquil Garden setting. Bring your yoga mat if you have one; a limited number of mats will be available. Held indoors or outside, weather depending. $45 for series ($40 NCBG members)

Tai Chi at the Garden
Sundays, April 14, 21, 28, May 5; 3–4 pm  Lisa Marcussen, Tai Chi Instructor
A 4-week experience. Class starts with a gentle warm up, new movement instruction, and then practice and review. Isabel takes you through the first third of a classical Tai Chi form—simple, low-impact movement appropriate for all abilities. Class will be held outdoors, when possible. Wear loose, comfortable clothing and flat, thinsoled shoes. $60 for series ($55 NCBG members)

Exploring Tree Food & Medicine: Making Tree Teas
Sunday, April 28, 1:30–4:30 pm  Kim Calhoun, Herbalist
Learn some of the traditional medicinal uses and food gifts of our common trees and how to bring them into your daily life through delightful teas. In this field study, suitable for all levels, we will explore the woodland trails and garden, covering tree identification, safe and sustainable harvesting, preparation, and uses. Includes handout with recipes (and inspiration for peaceful tea parties). Fee: $40 ($35 NCBG members). Learn more about the instructor at www.abundance-healingarts.com

Workshop

more programs on next page . . . >>
Lectures, Book Signings & Other Special Programs

A Darwin Day Presentation …

What Bird Songs & Bird Beaks Can Tell Us About Evolution
Tuesday, February 12, 7:30 pm

Steve Nowicki, Bass Fellow and Dean and Vice Provost for Undergraduate Education at Duke University, studies the evolution of animal communication, primarily in birds. He will present his studies on behavioral ecology and neuroethology, especially questions about the function, structure, and evolution of bird signaling systems. Free, but please register online.

In the DeBerry Gallery . . .
through February 27, 2013

Reconfiguration drawings by Jenny Eggleston

March 2–April 28, 2013

Time Suspended: Moments in Nature
photographs by Jean Anne Leuchtenburg

Artist’s Reception
Sunday March 10, 2–4 pm

Crossroads of the Natural World
Sunday, April 21, 2:30–4:00 pm

Crossroads of the Natural World is a richly illustrated love letter to the wild places and natural wonders of North Carolina. Join us as Tom Earnhardt, writer and host of UNC-TV’s “Exploring North Carolina” and lifelong conservationist, seamlessly ties deep geological time and forgotten species from our distant past to the unparalleled biodiversity of today. Sharing his own journey of more than sixty years, Earnhardt entices North Carolinians of every age to explore the natural diversity of our state. Free, but please register online.

The American Chestnut
April 26, noon–1:00 pm (Arbor Day)

Once there were over four billion American Chestnut trees in the United States, with one out of every four trees in the Appalachian forests a chestnut. Foresters called the American Chestnut “the most useful tree in the woods.” By the 1930s, most of the mature chestnut trees in the Carolinas were dying back to their roots due to chestnut blight disease. Kenneth Summerville, Ret. NC Forest Service, talks about the American Chestnut Foundation’s work to revive this great King of the Forest. Free, but please register online.

Native American Medicinal Herbs
Thursday March 21, 2:00–4:00 pm
Co-sponsor by the NC Unit of the Herb Society of America

The 2013 Herb of the Year, Sambucus nigra, elderberry, reminds us to honor our elders. Pat Kenny, retired medical and botanical illustrator, shows us what we can learn from our predecessors on this land. Kenney has worked at the National Institute of Health, the National Library of Medicine’s herb garden, and at the Dr. James Duke medicinal garden. Stay after the program to meet Pat and enjoy refreshments provided by the NC Unit of the Herb Society of America. Fee: $15 (free to NCBG & HSA members). Please register online.

13th Annual Evelyn McNeill Sims Lecture
Sunday, April 14, 2:00–3:30 pm

Seeing Trees

In “Seeing Trees,” writer Nancy Ross Hugo shares some of the secrets discovered in her intense, two-year investigation of the seeds, catkins, cones, flowers, resting buds, emerging leaves, and other small phenomena usually overlooked on backyard trees. She shares strategies to help observers see more, and profiles several common species using the stunning photography of Robert Llewellyn. Nancy argues these intimate details are as exciting to watch and worthy of viewing as roses or peonies, and that by becoming more familiar with them, observers will better appreciate both the genius of tree engineering and the importance of trees and all plants in the landscape. Read more about Nancy and her work on our website. Free, but please register online.
Children’s Programs

Blazing-Stars: Afterschool Nature Club (ages 6–8)
Tuesdays, Mar 5–Apr 30 (8 sessions, no class 4/2); 3:30–5:00 pm
Elisha Taylor, nCbg Environmental Educator

Did you know that 1 out of every 3 bites of food we eat depends on bees? Or that dragonflies begin their lives underwater? Explore the incredible world of butterflies, beetles, ants, and slugs and their relationships to plants and people. Students will sharpen observation skills and develop an understanding of the important role “bugs” play in nature. Hands-on activities, environmental games, and crafts make learning fun and engaging. Fee: $100 ($90 nCbg members)

Bluets: Preschoolers Exploring Nature (ages 4–5)
Mondays, Mar 18–April 29
(6 sessions, no class 4/1); 1:30–3:30 pm
Elisha Taylor, nCbg Environmental Educator

Learning comes naturally for 4- and 5-year-olds during this popular, fun-filled series that fosters a sense of wonder for the natural world through outdoor explorations, stories, crafts, and group play. Preschoolers will “dig in” to the vegetable garden, dip in the pond for tadpoles, observe birds up-close at feeders, and more. Healthy snack provided. Fee: $100 ($90 nCbg members)

NEW for Homeschoolers!
Nature Illustration through the Seasons, Part I: Spring! (ages 8–12)
Wednesdays, Mar 20–April 24 (6 sessions), 1:30–4:00 pm
Bob Palmatier, Artist/Educator & Elisha Taylor, nCbg Environmental Educator

Explore the art and science of seasonal change in the gardens, forests, and wetlands at the Garden during this unique and exciting class that combines nature illustration techniques and hands-on science learning. Participants will learn studio techniques and use materials of professional nature illustrators. We will spend time outdoors sketching, observing, and learning about spring ecosystems, including migration, bud burst, wildflowers, and more. Matted illustrations completed during the course will be displayed at a Spring Nature Art Show at the Garden with an artists’ reception for friends and family! Fee: $175 ($160 nCbg members), includes all supplies.

Nature Painting with Watercolor (ages 7–11)
Saturdays, Apr 27–May 18 (4 sessions), 10:00 am–12:00 pm
Annie Nashold, Artist/Educator

Nature’s wonders inspire artists of all ages. Join us as we explore sketching in the garden and producing watercolor paintings of our discoveries. Several nature themes will be focused on as we learn to transfer our sketches to watercolor paper, compose our images, and add color with watercolor. A collaborative project will be included in our work together and will be hung at the Garden for all to enjoy. Fee: $80 ($72 nCbg members), includes all supplies.

Family Programs

For the Birds Family Workshop (ages 5 & up w/ adult)
Saturday, Feb 16; 10:00–1:30 pm
Elisha Taylor, nCbg Environmental Educator

From yellow-bellied sapsuckers to Carolina chickadees, learn to identify common winter birds by sight and sound first-hand at our bird-feeding station, and then make some feeders to take home. Find out how to attract birds to your backyard and participate as a “citizen scientist” in Project FeederWatch. Fee, per child: $10 ($8 nCbg members)

Frogs, Fairies, and Sallies: Vernal Pool Wonders Family Workshop (ages 5 & up w/adult)
Saturday, Mar 9; 1:00–3:00 pm
Elisha Taylor, nCbg Environmental Educator

Chorus frogs, fairy shrimp, and spotted salamanders . . . oh my! Nature is waking up in the garden’s vernal pools. These spring nurseries are swimming with life in early spring. Peek into the ponds, meet live critters, and learn about the wonders and mysteries of life in a vernal pool. Fee, per child: $10 ($8 nCbg members)

Signs of Spring Family Hike (ages 5 & up w/ adult)
Saturday, Mar 23; 1:30 – 3:00 pm
Elisha Taylor, nCbg Environmental Educator

Celebrate the Spring Equinox with a leisurely hike through the gardens and trails searching for signs that the natural world is waking from its winter slumber. We’ll learn some facts and folklore while exploring for frogs, bursting buds, early birds, and other spring surprises. Fee, per child: $8 ($6 nCbg members)

Nature Tales: Storytime in the Garden (ages 3–5 w/ adult)
Thursdays, May 2 – Aug 8; 10:00 - 10:45 am

Join us Thursday mornings to listen to nature-themed books and enjoy hands-on explorations in the gardens. Program is held rain or shine. Fee, per child, per session: $3.50 ($3 nCbg members). Please see our website for themes for each Thursday session.

Nature Explorers Summer Camp 2013

Registration begins February 11

Nature Explorers Summer Camps offer children ages 4–10 an exciting opportunity for outdoor learning and fun on 10+ acres at the North Carolina Botanical Garden.

• Discover NC’s native gardens, forests, & wetlands
• Environmental education in a natural setting
• Hands-on activities, hikes, games, puppet shows, crafts
• Small group sizes with experienced & trained educators

Check out the camp brochure for more information: ncbg.unc.edu/nature-explorers-summer-camp/

more programs on next page . . . >>
Home Gardening Workshops

The Homeowners Guide to Designing & Building Your Residential Garden
Saturdays, Feb 9 & 16 (Inclement weather date: 2/23); 9:30am–12:30 pm
Katherine Gill, Landscape Architect & co-owner; Tributary Land Design + Build
This two-session workshop teaches basic principles of sustainable residential landscape design, from site analysis through construction, and provides hands-on experience for designing and building one's own garden. Using each participant's home as the project, class 1 leads you through the design basics—scale, site analysis, principles of plant design using natives and edibles, site design of pathways and outdoor rooms, and discuss types and uses of landscape materials. In class 2 we will apply what we have learned and each create a scaled schematic site plan for a home landscape. Participants will take home the beginnings of a design for their own yard. Bring a plot of your property to first class. Fee: $70 ($60 NCBG members).

Organic Rose Gardening
Saturday, Feb 2, 2:00–4:00 pm
Dilip Barman, Organic Gardener
Interested in growing roses but have stayed away because it’s too challenging? Perhaps the idea of pruning sounds difficult. Or maybe you don’t want to purchase and use strange-sounding chemicals. In this 2-hour workshop, students will dismiss myths and learn that growing roses organically is fairly easy. February is a great time to plant bare-root roses and to prepare for spring pruning of existing roses. Students gain information on how to select roses for the home garden; how and when to plant; issues of bare-root, potted, grafted, and own-root; pruning; and maintenance. Dilip Barman, organic gardener, has grown roses of many types organically and won awards for his roses. $37 ($32 NCBG members).

Soil is Everything: A Vegetable Garden Workshop
Sunday, Mar 3 (Inclement weather date: 3/17), 2:00–3:00 pm
Greta Lee, Permaculture Designer and Organic Gardener
Claire Lorch, Carolina Campus Community Garden Educator
A hands-on, outdoor experience for beginners and those who want to learn more, this workshop will be held at the Carolina Campus Community Garden (CCCG) (http://uncgarden.web.unc.edu). We’ll cover soil testing and sampling, comparing soil types, building your soil, pros and cons of raised beds, effects of tillage on soils, edging, soil amendments, and more. Following the workshop, join CCCG volunteers for their Sunday workday and learn more about this garden, which aims to provide the space and support to grow vegetables and fruit so that all UNC employees have access to fresh produce. Fee: $15 ($10 NCBG members).

Perennial Vegetables
Sunday, Apr 21 (Inclement weather date: 5/5), 2:00–3:00 pm
Greta Lee, Permaculture Designer and Organic Gardener
Claire Lorch, Carolina Campus Community Garden Educator
This workshop will be held at the Carolina Campus Community Garden (CCCG) (http://uncgarden.web.unc.edu). Vegetable perennials are often undervalued by gardeners and include a wide variety beyond the traditional rhubarb and asparagus. We will cover the growing and harvesting of leafy greens (such as sorrel and tree collard), onions (such as perennial green onions and chives), tubers (such as sun choke and ground nut), and much more. You will have an opportunity to sample some of these vegetables and take home plants for your own garden! Fee: $15 ($10 NCBG members).

Staff Notes

We welcome Heather Summer, the new Seed Program Coordinator at the Garden. Some of you may remember her from several years back when she worked in the seed program before leaving to have two beautiful daughters. Heather has an undergraduate degree in Biology from Florida State University and a Masters in Ecology from the University of Georgia. “My role here at the Garden will be collecting, cleaning, storing, and documenting native seed from around the Garden and beyond, as well as coordinating both the Seed Distribution and Wildflower of the Year Programs. I am very excited to be back and am looking forward to a busy year of seed collecting and becoming familiar with the new landscapes.

A hearty welcome also to Rebecca Dotterer, the new Garden Shop Manager. Rebecca has worked in natural science and cultural museums for over 25 years in both eastern NC and Canada. Most recently, she returned to the Chapel Hill area from Wilmington, NC, where she was the education and visitor services manager at Cape Fear Museum of History and Science. Originally trained as a plant taxonomist, Rebecca’s love of the natural world and interest in its many fascinating details also led her to join the Guild of Natural Science Illustrators. Rebecca has been a volunteer at the Coker Arboretum and more recently the Herb Garden. “I am excited to be part of the NCBG team and aim to have the Garden Shop reflect both the Garden’s mission and beauty.”

We hope you will join us in wishing all the best for our colleague Christine Piscitello. Chris began working with the Garden’s Development Department more than a decade ago as a temporary employee. In 2004 she became the Membership Assistant. Until last August, she was in charge of tracking all Garden memberships and donations, creating mailing lists, writing letters of acknowledgment, helping with events, and much more for the Garden. She worked closely with UNC’s Development
Office, which records gifts and acknowledges the Garden's donors, and she represented the Garden in planning for a new system of donor information management for the University. We miss Chris's warm smile, dedication, and many contributions to our team and to all who support the Garden, and we wish her health and happiness in her retirement.

In November Director Peter White gave the talk “Turn the Poet Out-of-Doors: A Natural History of Robert Frost” at Claremont McKenna College’s Cook Atheneum. He visited with Scott LeFleur, director of horticulture, and Lucinda McDade, acting director, at the Rancho Santa Ana Botanic Garden, a conservation-focused botanical garden also in Claremont, CA. In January he launched into teaching Conservation Biology at UNC with some 80 undergraduate and graduate students. He attended the Board Meeting of the Center for Plant Conservation in St. Louis in January 25. Two papers written by Peter were recently accepted for publication by Conservation Biology.

In October, Conservation Ecologist Mike Kunz traveled to Onslow Beach at Camp Lejeune Marine Corps Base to collect seeds of the federally threatened \textit{Amaranthus pumilus} (seabeach amaranth). This work is part of an ongoing funding from the Department of Defense (DOD) to the Center for Plant Conservation and it’s participating institutions (NCBG!) to safeguard rare species found on military bases. While there, Mike also worked with the U.S. Fish and Wildlife Service (USFWS) to make additional seabeach amaranth collections from Pender County beaches. In November, a milestone was reached in our restoration project at Ft. Bragg (see November 2012 Newsletter, “Consider This” column). Mike led the effort to plant \textit{Amorpha gorgiana}, \textit{Astragalus michauxii}, \textit{Lilium pyrophilum}, and \textit{Lysimachia asperulifolia} in November, with support from Director of Conservation Programs Johnny Randall. The effort involved working with partners at the U.S. Army Corps of Engineers, DOD, USFWS, North Carolina Natural Heritage Program, and N.C. State Parks. “Special thanks to Garden staff who participated, including Chris Liloia, Amanda Mixon, Matt Daley, Heather Summer, Andy Walker, Russell Nash, and Alena Steen,” says Mike. “With these expert crews we were able to plants thousands of individuals over the course of eight days.”

In November Herbarium Director Alan Weakley published the naming of a new, and imperiled, species of Barbara's buttons, \textit{Marshallia legrandii}—a species endemic to NC and VA. The Marshallia is named for Harry LeGrand, N.C. Natural Heritage Program biologist, who “first found and recognized the unusual morphology and importance of the population [in Granville County], leading ultimately to this re-evaluation.” Read more about the new species on our website: ncbg.unc.edu/news-and-press/. The Garden, with Alan Weakley as host, was the site of a meeting of the Ecological Society of America’s Vegetation Classification Panel in January.

In early October Johnny Randall, Director of Conservation Programs, attended and presented at the 8th Eastern Native Grass Symposium in Charlottesville, VA. His talk was titled, “Resistance and Resilience to Climate Change in the Piedmont Savanna.” Johnny also presented about the Garden’s conservation programs to the NatureServe Science Panel, on which Garden Director Peter White serves, in September, and at the Seeds of Success national meeting in late January—both hosted by and at the Garden.

The Development Department is very grateful to have the superb help of two new part-time staff members. Tobias Perrino, who started work just before the Fall Plant Sale, is a student at UNC-CH and lives in Raleigh. He has worked in research offices at UNC and at the University of Chicago, as well as in development for the Test Positive Aware Network, a community organization in Chicago. Tobias says his favorite part of the garden is the Herb Garden. “My only garden at home is a potted herb garden on a balcony! I feel very lucky to be working in such a beautiful setting.” Allison Essen was raised in Raleigh, lived in Chatham County 30 years ago, and has only recently returned to the area. She graduated from UNC-Chapel Hill majoring in Chemistry and English. While there, she performed in the Wind Ensemble with Alan Weakley! Before raising her three sons she ran a marketing department for an international science and medical publishing company in New York City. She spent many years in the Bay Area, where she was an active volunteer and fund raiser for the San Francisco Symphony, Mill Valley Little League, and the Boy Scouts of America. Allison has always had an interest in native plants: “I often hiked the headlands of Marin County outside of San Francisco with my wildflower guide in hand.”

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A New Flora for the Old Dominion—and not a century too soon!

The 3,164 plant species native to or naturalized in Virginia are the focus of the much-awaited *Flora of Virginia*, a 1,554-page manual of the plants of the state published in December 2012 by the Foundation of the Flora of Virginia (Richmond, VA) and the Botanical Research Institute of Texas Press (Fort Worth).

This is Virginia’s first flora since the “Flora Virginica” was published in Holland in 1762!

The flora is a tool for botanical and ecological research, education and conservation. It was produced by the Flora of Virginia Project, with important partnership support from the Virginia Department of Conservation and Recreation. The manual was written by Alan S. Weakley (Director of the UNC Herbarium, a division of the North Carolina Botanical Garden, and adjunct professor of biology at UNC–Chapel Hill), J. Christopher Ludwig (chief biologist with the Natural Heritage Program of the Virginia Department of Conservation Resources [DCR]), and John F. Townsend (staff botanist with the Natural Heritage Program of the Virginia DCR).

The term “flora” can refer to the plant life of a region or to a book that describes the region’s plant life. The original “Flora Virginica” was written in Latin with a single illustration—a map of Virginia. It was based in large part on plant specimens collected and descriptions written by John Clayton, a naturalist who was clerk of Gloucester County, Va.

“The essential purpose of the ‘Flora of Virginia’ is to enable identification of plants in the commonwealth,” says Ludwig. “Each species is described in fine detail, and other information is presented, such as flowering and fruiting times, the plant’s status in the state and the characteristics of its habitat.”

The new flora features 1,400 pen-and-ink plant illustrations, commissioned for the book, by botanical artists Lara Gastinger, Michael Terry, and Roy Fuller. Plants are organized by family (such as the grasses, the orchids, the pines, the mints, the asters). Users are guided through the task of identifying a plant by the flora’s keys, which help them winnow down the possibilities through a stepwise process.

“Virginia has a richer plant life than most other states,” comments Ludwig. “There are many reasons for this—the diversity of topography from the coast to the Appalachian Plateau, the patchwork of soil and rock types that are the basis of plant habitats, and the fact that many northern plants reach their southern limits in Virginia, and many southern ones reach their northern limits here.”

Special chapters present the history of botanical exploration in Virginia, the processes by which the state’s plant communities have developed over time, and 50 “botanizing hotspots” featuring the best areas to explore and learn about Virginia’s plant life.

Production of the flora took 11 years and was made possible by the support of individual donors, grants, and flora partners: the Virginia DCR, the Virginia Native Plant Society, the Virginia Botanical Associates, the Virginia Academy of Science, and the Lewis Ginter Botanical Garden.

The flora was published by the Botanical Research Institute of Texas Press in Fort Worth. “We are proud to see this product come to fruition and to have been able to realize it with an eye to conservation,” says Tom Smith, DCR’s natural heritage director and a member of the Flora of Virginia Project’s board. “The flora is going to be important to botanists, ecologists, planners and environmental consultants in finding, managing, conserving and restoring our native plant communities for generations to come.” It already has been designated the official textbook for this spring’s plant taxonomy course at James Madison University.

Weakley points out that “the book will be very useful in adjacent states, including North Carolina. Only in the pinelands of the southeastern part of North Carolina, will the Flora of Virginia be significantly incomplete, because of the many southern species at their northern range limit there. I’ll be adopting it for my Local Flora classes” (UNC-CH’s Biology 272).

To order a copy of the “Flora of Virginia,” visit the Flora Project’s website, www.floraofvirginia.org, and click the red button. The price is $79.99, plus $6.50 shipping. Copies will also be available at the Garden Shop at the North Carolina Botanical Garden.
A Developing Garden
notes from Charlotte Jones-Roe, Director of Development

The end of 2012 did not bring snow—in fact, beautiful purple asters are still blooming near the entrance to the Education Center! However, the last few months have brought much needed financial support from our members. Florence Peacock and Peg Parker both made very generous gifts to help support staff and build the Garden’s capacity. We depend on private gifts for an increasingly large percentage of our income and staff support, and their special gifts will help for the months and years to come. Our former president, the late William Joslin, understood this need. Last week we received the final distribution from his estate, with half of the amount unrestricted. We are forever indebted to our former president and friend for the many ways he helped our conservation Garden.

Many of you paid your dues or gave memberships to others during the fall and holiday seasons. We are especially grateful to David Joslin, Paul LaPoint, Karla Reed, Mary and Paul MacDougal, Frances and Gary Whaley and the Whaley Family Foundation, Larry Howard, Muriel Easterling, Jonathan and Mary Howes, Tunkie and Pat Miller, Carmen Hooker Parker, Cary Richardson Paynter, Richard Stillman, Janice Stratton, Larry Blanton and Candace Haigler, Debbie Hill, Joel Mattos, Mac McLendon, Cyrus Miller, Don Schnell, Preston Stockton, and John and Ashley Wilson.

Most weeks, Jim Schmidt drives from Greensboro to volunteer in the Garden’s nursery. Once again, Jim’s former employer, Sherwin-Williams, has not only matched his personal check but made a generous gift to the Garden in honor of Jim’s service in retirement. Among the other generous contributors since the last Newsletter are Dana Quade, Bruce Carney, Ruth Humphry, Diana and Bob Lafferty, Diane Linfors, Carrie Porterfield, Linda and Al Rimer, John Staelin, Woody Burns Elizabeth Foreman, Virginia French, Judy Hallman, Brian Kileff, Joseph Rodriguez, Gloria and James Rolls, Donna and Mark Simon, Susan Strine, and Clarence Whitefield. Hundreds of others have renewed their memberships and made gifts to be used “where the need is greatest,” and we appreciate each and every one.

Barbara Hiestand designated her gift for the General Operating Fund Endowment; earnings on her gift and those of others who contribute to this fund will help the Garden in years to come.

Many Garden members make gifts to particular projects in addition to their membership dues for general support. Marcella Grendler made another very generous contribution for the construction of the structure that will shade participants in the Horticultural Therapy program. Richard Heiney and Catherine Bollinger and Tom Scheitlin are among our recent contributors to the Horticultural Therapy Program. We are delighted to report that Tom and Margaret Scott and their friends and family have competed gifts and pledges to support the new Plant Sale Pavilion. Bill and Jean Leuchtenberg made a gift for Mason Farm Biological Reserve, and Lynn Richardson, Kat Mordecai, and Patricia Murphy were among those contributing to build the Mason Farm Biological Reserve Endowment. Healing and Hope Through Science, the Garden’s program to take science and nature education to children who are hospitalized, recently received wonderful funding news (see p. 1). In addition, the UNC Hospitals Volunteer Association and individuals like Eleanor Bisbee have made generous contributions for this innovative outreach effort.

Karla Reed, Jane and Mark Ritchie, William Watts, Cathy and Turner Whitted, James Joslin, and Tanya Luminati gave generously to help build the Coker Arboretum Endowment. And, as we were going to press, a check from the estate of William Joslin arrived to add to this fund that will help make sure the Arboretum always has the support it needs.

Stephanie Simon’s generous gift for the Children’s Garden and Educational Outreach will be matched by her company, CA Technologies. Among the other donors who recently designated their gifts for this purpose were Logan Mauney, Frances and Gary Whaley, and Wardlaw Lamar.

The Garden’s Conservation Fund received a number of gifts since the last Newsletter, including those from Marion and Victor Schoenback, Catherine Bollinger and Tom Scheitlin, Barbara and Lee Pedersen, Dorothy Allard and Bill Martin. The Morgan Creek Alliance received a contribution from local outdoor outfitter Townsend Bertram & Company.

Battle Park received an outpouring of gifts at the end of the year, and these will add to the growing endowment that will ensure a permanent source of funds for our unique campus forest. Among the contributors were Elston and Mike Miles, Brad and Cheryl Briner, Carol Hogue, Sandy and Bet McClamroch, Gifford Scott, Joseph Kalo, Linda Passman, Aubrey and Jeannette Tolley, Evelyn Daniel, Sydney Elstran, Eleanor and Robert Broadus, Doug and Roberta Tilden, Mack and Susan Little, Barbara Stiles, Priscilla Taylor, and Joan Guilkey designated their gifts for Battle Park as immediately expendable, and these funds will be put to work right away. Charles and Karen Goss and “Love Chapel Hill” designated their gifts for the restoration of Forest Theatre.
Alan Weakley, curator of the Herbarium, has accomplished an extraordinary project in the publication of the *Flora of Virginia* (see p. 12). Among Garden members are many Friends of the UNC Herbarium; we received recent contributions from Reid Bahnm Jr., Christine Levesque, Charlie Williams, Jean Weakley, Alan Weakley, Ginger Travis, and Dorothy Allard and Bill Martin, and many others.

Katsuhiko Kondo and Catherine Bollinger and Tom Scheitlin were among those contributing to the Living Plant Fund, to make sure the Garden staff has money with which to purchase specimen plants and the materials to install them in the Garden landscape.

This past summer, the Garden benefited from the work of our first Fred and Virginia Houk Sustainability Intern. Virginia Houk, Vespa Carolinas, Inc., and Epsilon Eta Environmental Honors Fraternity (see p. 3) were among the contributors who are building the endowment to fund this program that honors Virginia Houk and her husband, the late Fred Houk.

The Carolina Campus Community Garden continues to benefit from contributions, including those from the Fox Family Foundation, Pandora Brooke, Anne Cabell, and others. We are grateful to Chancellor Holden Thorp for his efforts to commit University funding for this program that provides gardening experience for students and fresh produce for low-income University employees.

Several Garden members who prefer not to be named at this time have let us know that their estate plans include the Garden. Planned gifts have allowed the North Carolina Botanical Garden to grow in ways we could scarcely have imagined a year ago.

For information about methods of giving that will help the Garden and may save you on taxes, please call 919-962-9458 or Gift Planning specialists at UNC for a free consultation (1-800-994-8803).

With gratitude to all of you who contribute time and money to support the mission of the North Carolina Botanical Garden, and with best wishes for the year ahead,

**Charlotte**

Charlotte Jones-Roe  919-962-9458  jonesroe@unc.edu

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**Gifts**

**Thank you** to all who support the Garden, especially to the many whose membership dues and gifts were received in the period October 1, 2012–December 31, 2012.

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Bob Wright
Virginia Wu
Sandia Phillips Yaggy
Jo Ann Yates
Harry & Jean Yeatman
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DESIGNATED GIFTS

**Park**
Joan Davis Guillen
Priscilla Patterson Taylor

**Park Endowment**
Delight & Jim Allen
Frances Meadows Allen
Luther Bradford Black III
Scott & Victoria Bouldin
Mary E. Bowers
Brad & Cheryl Briner
Evelyn & Paul Brinch
Eleanor & Robert Broadus
Cotton & Jan May Martin Bryan
Linda Keith Chadwick
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Sydney E. Ellen Elsran
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Charles Lorelli
Judith Gale
Kip & Susan Gerard
Danny Glover
David & Lallie Godschalk
Nancy Hagwood &
McNiece
Carol Clarke Hogue
Frances Drane Inglis
Adam & Susan Jones
Charlotte Jones-Roe & Chuck Roux
Nell D. Joslin
Mary Coker Joslin
Joseph & Monica Kalo
Stephen Keith & Lisa Glover
Patricia Kiffiney
Timothy A. Kuhn
Mack & Susan Little
Sandy & Bill McClamroch
Elston & Mike Miles
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Ken Moore &
Kathy Buck
Steve Moore
Linda Passman
Lars Gustav Scholtz,
Gofford &
Emy & Richard Scoville
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Aubrey & Jeannette Tolley
Judy Warren

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Daniel Stern
Mary W. Enabes
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James Devereux Joslin
Tanya Kennedy Luminati
Jay Manalo
Maric & Michael Mayo
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Karla Reed
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Han & Renate Rodenburg
Wendy S. Rose
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**Conservation Fund**
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Tom Scheitlin
Cathy Smith Cole
Barbara & Paul Nettlesheim
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Stephanie Simon

**Forest Theatre**
Saiannah Bada
Paul Finkel
Charles & Karen Goss
Cary T. Price
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**Forest Theatre Restoration**
Tanner & Sumemtha Golli Hock
Love Chapel Hill

**Fred & Virginia Hooke Sustainability Internship**
Virginia Stewart Hooke
Epsion Eta Environmental
Honorz Fraternity
Vespa Carolinas Inc

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**Janet M. Krakauer Endowment for Botanical Illustration**
Tom Krakauer

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**Mason Farm Biological Reserve Endowment**
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**UNC Herbarium Endowment**
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Michael & Julia McVau
Leave a Legacy...  
If you would like to speak with someone about making a special gift to the Garden, call Charlotte Jones-Roe at 919-962-9458 or UNC’s gift planning experts at 800-994-8803.

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Open Houses for Friends

This past fall, the Garden hosted two “Open House” events for our neighbors, the families staying at the Ronald McDonald House of Chapel Hill and SECU Family House, both across the street on Old Mason Farm Road. Twenty-seven people visited on the beautiful evening of September 19 to birdwatch, decorate bird feeders, eat sundaes, and enjoy the fall garden. All surveyed remarked that the event helped their family cope with the stress of being away from home and spending lots of time in the hospital, and that they enjoyed the event very much. We had a small group of fantastic volunteers who helped make it all possible and look forward to future Open Houses for these neighbors this spring and summer. Please contact Katie Stoudemire (sciencekatie@unc.edu) if you are interested in volunteering to help with these very special events.

Plants and Pints

UNC Student organization and Environmental Honor Fraternity Epsilon Eta coordinated a benefit event on November 15, 2012, to raise funds for student internships at the North Carolina Botanical Garden. Called “Plants and Pints,” the event was hosted at The Library, a pub on Franklin Street in Chapel Hill.

“We designate these funds to support the Fred and Virginia Houk Sustainability Internship Fund,” explained Chapter President Travis Courtney. “The Sustainability internship matches closely with the mission of Epsilon Eta and we want to support our fellow students pursuing and enhancing sustainability at UNC and the North Carolina Botanical Garden.”

Epsilon Eta’s event was a networking and social time for students, faculty, staff, and community supporters of sustainability.

Epsilon Eta was founded by students at UNC Chapel Hill in 2007 in order to recognize and connect outstanding students whose primary academic focus is the environment, and to provide them with a network of support and opportunities during and after their academic career. Garden Director Peter White and Battle Park Curator Stephen Keith serve as faculty and staff advisors, respectively, to the fraternity.

The men and women of Epsilon Eta regularly volunteer at the Garden, in the community, and in other areas around the state.

Wildflower of the Year

Meet the 2013 Wildflower of the Year: New Jersey-tea (Ceanothus americanus). Photo to left taken in the garden. The beautiful t-shirt design on the right is by artist Dot Wilbur-Brooks. Read about New Jersey-tea in the “2013 Southeastern Native Plant Seed List,” which is enclosed in this newsletter.
We Need You—be a Volunteer!

Are you an avid gardener who would like to help beginning gardeners get started or to answer questions from gardeners who have recently moved to NC? Consider becoming a Green Gardener Volunteer with us. We will offer training soon for this special group of volunteers (date & time TBA). Training involves weekly sessions (5–6 weeks) with experts who share their expertise and familiarize you with current resources to use in answering gardening questions. After completing training, Green Gardener Volunteers take turns working at the Green Gardener Reference Desk in our Education Center, from 12:00–2:00 pm on weekdays during the growing season.

Or . . . how about joining the Volunteer Ambassador team? If you are looking for a volunteer opportunity where you can learn all about the Garden and meet and greet visitors, we’d love to have you join our team.

We have other opportunities too. Please contact Barbara Wendell, Volunteer Coordinator: volunteerncbg@unc.edu (919-962-0522). And take a look at: ncbg.unc.edu/become-a-volunteer/

Welcome Spring!

The NORTH CAROLINA BOTANICAL GARDEN publishes this newsletter four times a year.

Editor & Layout Laura Cotterman
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How to tell if your Dues are Due . . .
Please check your membership renewal date, posted above your name & address. Use the enclosed envelope to renew! It costs $ + time for us to send reminder postcards. Thanks!

Rosemary for Remembrance
Thursdays, April 11, 18, 25 & May 9; 10:30 am–12 pm
Our Horticultural Therapy Program is offering a special program for couples: people with early stage Alzheimer’s Disease and a caregiver (relative, companion, or aide). Participants will learn innovative strategies for health and wellness through working with plants and gardening. Sessions will address the needs of each individual in the caregiving relationship. The benefits of horticultural therapy include mild physical activity, social interaction, sensory stimulation, creative expression, connection to nature, and relaxation and renewal. Fee: $100 ($90 NCBG members). For more information and to register, please contact Sally Haskett, haskett@email.unc.edu (or call 919-962-0522), who will arrange a phone interview.

Inside this issue . . .
• Lots of exciting new programs, including an Aldo Leopold Celebration
• The carbon equation
• A new flora for the Old Dominion
• The 14th Annual Evelyn McNeill Sims Native Plant Lecture on Seeing Trees
• Nature Explorers Summer Camp!
• And much more!

Garden Hours
Weekdays Year-round: 8 am – 5 pm
Weekends through May 2013: Saturdays 9 am – 5 pm, Sundays 1 pm – 5 pm
Weekends June–August 2013: Saturdays 9 am – 6 pm, Sundays 1 pm – 6 pm
Consult our website for holiday closings