The cover of this publication asserts boldly: GROW.

Over the years, we have deployed a variety of names to entitle publications: Growth Report, Growing in Mind, Growing the Future. GROW – in its capitalization – describes the essence of who we are even more succinctly.

Also on the front cover resides an image of the pink lady’s slipper orchid (Cypripedium acaule), one of our most prized native wildflowers. Lady’s slippers owe their beauty in part to symbiotic mycorrhizal fungi that partner with root systems to assist such things as seed germination and nutritional uptake. This concept of “assistance-reliant growth,” moderated by what we might term as “wise growth,” has been central to the Arboretum’s efforts for 32 years. Between capacity and achievement, we work toward creating a healthy balance.

Capacity for achievement is clearly driven in large part by our supportive partners – the North Carolina General Assembly, UNC System, U.S. Forest Service, foundations, NGOs, individual donors, volunteers, members and staff. Without these engaged partners, there would be very limited capacity, very limited achievement and very little growth.

These network partners, our “mycorrhizae,” have been quite active in building the Arboretum’s capacity during 2018. Their substantial support has made possible a 2019 that will feature achievements in master planning, programs, facilities and infrastructure. This year, we will publish our first master plan since 1990. Visitors will arrive to find a parking lot double in size. The Plants of Promise Garden will sport new walks and plants. The Willow Pond Aquatic Education Center will complete its first of three phases. The K-12 Youth Education Program will spread farther across the state beyond its current 23 counties, with the capacity now in place to serve all 100 counties by 2024.

We must never fail to remember with gratitude the empowering importance of the “mycorrhizal” partners who have made these achievements possible. The beauty and growth they nurture, just like the fascinating lady’s slipper, will soon be evident.
Native Orchids of the Southern Appalachian Mountains

by Scott Dean, Arboretum adult education instructor and Blue Ridge Naturalist

The Southern Appalachians are noted for the great diversity of wildflowers native in the area. The orchid family, Orchidaceae, is the second largest family of flowering plants, with some 880 genera and 26,000 species worldwide. Orchids are also considered to be one of the most evolutionarily advanced plant families and have many unique reproductive and nutritional strategies.

The North Carolina Native Plant Society lists 69 orchid species in the state. While several of these, such as lady's slippers and the purple and yellow fringed orchids, are quite showy, many go unrecognized and underappreciated.

Species such as coral roots, rattlesnake plantains and lady’s tresses feature much smaller flowers, which are also quite intricate and beautiful when magnified.

Coral roots, in the genus Corallorhiza, are saprophytes, which take nutrition from decaying organic matter in the soil. Since they are not photosynthetic, they lack chloroplasts (the organelles that perform photosynthesis) and resultantly are not green.

Another smaller orchid is puttyroot (Aplectrum hyemale), with its large single leaf developing in summer, lasting through the winter and withering before its tall stalk with yellowish flowers blooms. The plant typically has two root bulbs, called “Adam and Eve Root” by the region’s early settlers. Native Americans made a poultice of the roots to use on boils and brewed a root tea for bronchial problems.

Yellow lady’s slipper (Cypripedium calceolus).

The lady’s slippers are probably the best known of our native orchids and certainly are the largest and showiest of them. The most often seen are the pink lady’s slipper (Cypripedium acaule) and the yellow lady’s slipper (Cypripedium calceolus). These are commonly known as “moccasin flower” and “American valerian.”

The lower lip of the flower (actually three fused petals) is known as the “labellum” and features an opening at the top of the flower. In the pink species, the labellum is lined with minute hairs growing downward to prevent insects from climbing out of the flower. To exit the labellum via the “slit” between two of the fused petals, the insect must pass by the style and stamen, thus pollinating the plant. In a University of Maryland study of 3,000 orchids, only one-third of the specimens flowered in a 16-year period and only 23 of those were successfully pollinated! The average life span of this plant is 20 years, thus increasing its chance of being pollinated. When successfully pollinated, this species produces an average of 60,000 seeds, which is more than enough to keep the species viable.

Orchids rely extensively on fungi in the soil that grow into the roots and help increase the plants’ nutrient intake. Many are so reliant on these mycorrhizae that they cannot survive without them.

Beautiful, delicate and fascinating – orchids contribute greatly to the natural world.

Scott Dean is a frequent instructor for the Arboretum’s Adult Education program. Learn more about native orchids and other wildflowers from Scott by taking his spring and summer flora identification classes, participating in his summer wildflower hikes or attending the 21st annual Asheville Orchid Festival, April 6 – 7. More information can be found on page 7 or online at ncarboretum.org.
Mountain Science Expo to be featured on “American Spring LIVE” National PBS Program

The Arboretum’s Mountain Science Expo will come “alive” and into the homes and screens of millions of people as part of the “American Spring LIVE” event hosted by PBS’ “Nature” program. This new three-day series, held April 29 – May 1, highlights spring’s arrival across North America and encourages viewers to take an active role in the study of seasons and the changing climate by participating in an array of citizen-science projects. As part of the event, ten PBS partner stations, including UNC-TV, were selected to develop multiplatform promotional campaigns of local citizen-science projects and events, as well as provide training sessions for citizen-science instructors. The Mountain Science Expo will be featured as one of six citizen-science events held across the state and will be broadcasted locally on UNC-TV’s website and social media channels during “American Spring LIVE,” as well as on PBS’ website later in the year.

Native Azalea Collection Gets Facelift

As you explore the bountiful blooms of the Arboretum’s National Native Azalea Collection this spring, be on the lookout for new plant labels and azalea plantings. Thanks to the hard work of our horticulture staff, this nationally accredited garden will be even easier to explore and enjoy. Be sure to pick up an Azalea Guide at either the Baker Exhibit Center or Education Center for more information on bloom times and growing recommendations.

Youth Education Program Receives $1 Million Grant from North Carolina GlaxoSmithKline Foundation to Support Statewide Expansion

The Arboretum is proud to announce that the North Carolina GlaxoSmithKline Foundation granted the Arboretum’s Youth Education Department $1 million to grow its innovative K-12 science education programs to all 100 North Carolina counties over the next five years. The grant will utilize the funds to expand the Arboretum’s three K-12 project-based outdoor education programs: Project OWL, an environmental education certification program for pre-service and active K-5 teachers; Project EXPLORE, a teacher coaching program for K-12 teachers; and ecoEXPLORE, an out-of-school citizen-science program for children in grades K-8.

Already active in 23 North Carolina counties, the Arboretum’s Youth Education department will work with school systems, county library systems, local and state parks, environmental education centers, colleges and universities, government agencies and other partners to expand these programs across the state by 2024.

“As an affiliate of the University of North Carolina System, we are eager to work with teachers, librarians, park directors and others to provide K-12 students with the knowledge and skills to succeed in higher education and the workforce,” said George Briggs, executive director of The North Carolina Arboretum.

This is the second time that the Youth Education Department has received a grant from the North Carolina GlaxoSmithKline Foundation. In 2012, the Project EXPLORE program received a Ribbon of Hope grant to support the program’s three-year pilot phase. To date, Project EXPLORE has supported 120 teachers and 6,731 students in 56 schools in 21 North Carolina counties.

“We are very grateful to the North Carolina GlaxoSmithKline Foundation for making such a major investment in our shared goals,” added Briggs. “From the mountains to the coast, we look forward to impacting the next generation of STEM professionals in our state.”
From its art and craft heritage to its bluegrass music to serving as one of the major craft brewery hubs in North America, Western North Carolina is known to many for its unique offerings and accolades. Did you also know that this region is considered the salamander capital of the world? In fact, the Southern Appalachians are at the epicenter of salamander evolution and contain the greatest diversity of salamander species in the world. The Arboretum and surrounding Bent Creek area serve as a habitat for many of these critters, including the rare mole salamander, which can be found near the Arboretum’s new outdoor education setting, Willow Pond. In the following Q&A, Lori Williams, wildlife biologist with the North Carolina Wildlife Resources Commission, goes underground and uncovers the unknown about the rare mole salamander.

1. What makes the mole salamander so unique?
Mole salamanders, like all members of its genus (*Ambystoma*), are known as “fossorial” salamanders – meaning that they spend the majority of the year underground, only emerging to make often long-distance migrations to the same pools, ponds or wetlands in the winter to breed every year. After breeding, adults migrate back to the uplands and their underground burrows. These life history traits and specialized habitats make mole salamanders and those in their genus very unique and rarely seen outside of the breeding season.

2. How do you identify a mole salamander?
Mole salamanders and their cousins in the genus *Ambystoma* have characteristically “chunky” bodies and are larger and more robust than other terrestrial or semi-aquatic salamanders. They have a large, flattened, stout head and long toes, which help them dig in soil and burrow in upland habitats. In addition, their tails are somewhat keeled in order to help them swim in their aquatic habitats. They are smaller in body size than their more common cousins, spotted salamanders, and are greyish in color with splotches of bluish-white on their sides. Another rather anthropomorphic characteristic that people note about all the salamanders in the genus *Ambystoma*, including mole salamanders, is that they appear to always have a smile on their face!

3. What is their habitat like?
Mole salamanders need vernal or seasonal pools, small shallow ponds, wetlands or other aquatic habitats that do not have fish (which would eat their eggs and hatchlings). The Arboretum’s Willow Pond is a great breeding site for them because it is fishless and is situated in a forested landscape, which provides a lot of upland habitat that can be used to migrate across. The mole salamanders’ preferred aquatic breeding sites are shaded, vegetated around the edges (in the riparian zone) and have abundant leaves, sticks, branches or submergent vegetation in the water that they can use as a cover, foraging habitat and as a place to deposit eggs, typically on the underside of leaves or in leaf packs on the bottom of the pool.

4. How is the Arboretum working to conserve these salamanders during the Willow Pond renovation?
Mole salamanders are considered rare, which means they are legally protected from collection, harm, or sale. They are identified as a Species of Greatest Conservation Need in the *NC Wildlife Action Plan* (2015) and officially listed by North Carolina as State Special Concern. As a result, the Arboretum worked closely with the N.C. Wildlife Resources Commission (NCWRC) to research and identify the best relocation plan for animals currently residing at Willow Pond in preparation for the renovation project. Beginning in August and throughout the fall, NCWRC worked with the Arboretum’s Youth Education department to rescue approximately 440 mole salamanders (larvae and adults) along with other species at Willow Pond, including the red-spotted newt, American bullfrog and spotted salamander. This timeline was determined based on the salamander’s seasonal movement prior to its breeding season in order to create minimal impact on the species. Animals were rescued and relocated to a pond right outside of the Arboretum property near Lake Powhatan. As construction continues at Willow Pond, the Arboretum will consult with NCWRC and the project contractor to capture any animals left behind during the initial relocation process.

Although small, slimy and often unseen, salamanders have a huge impact in our ecosystem and natural heritage, serving as bio-indicators of the health of our environment. By investing in the long-term management and protection of Willow Pond, the Arboretum will help sustain these animals’ future habitats and educate current and future generations about these amphibians and their value to our mountain region.

To learn how you can contribute to the Willow Pond project, please visit ncarboretum.org/joingive or contact Lisa Baker, donor relations manager, at lbaker@ncarboretum.org or 828-665-2492 ext. 221.
**EXHIBITS**

**IN THE DARK EXHIBIT**
Explore the mysteries of the dark as part of the Arboretum’s spring exhibit, In the Dark, on display daily through May 12, from 9 a.m. to 5 p.m., inside the Baker Exhibit Center. This hands-on, family-friendly exhibit delves into dark environments and the unique ways animals, plants and humans have adapted to areas with little or no light. Through mechanical displays, life-size animal models and informational panels, visitors will discover what thrives beneath the soil, under the sea, in the shadows of the night and within other dark environments.

As part of the exhibit, the Arboretum will host two special evening events: Bat & Moth Party on Saturday, April 13, from 8 to 11 p.m., and What Goes HOP in the Night on Friday, May 10, from 8 to 10 p.m. Attendance is free, however, online registration is required and standard non-member parking fees apply. A suggested five-dollar per person donation is welcomed and will help support The North Carolina Arboretum Society. Please note that children must be accompanied by an adult during all activities.

Exhibit support for In the Dark is provided in part by The North Carolina Arboretum Society, Asheville Citizen-Times, RomanticAsheville.com Travel Guide, Gasperson Moving & Storage, Hilton Asheville Biltmore Park and Smoky Mountain Living Magazine.

**CROSS-POLLINATION**
Don’t miss the final weeks of Cross Pollination: Fiber, Clay and Photography, on display daily through April 14. This mixed-media art exhibit features 2- and 3-D work using fabric, photography and pottery by four artists, Terry Ashley, Karen-Eve Bayne, Lucy Clark and Judy Smith. Each piece is created with its own unique voice and showcases how artists collaborate through the cross-pollination of ideas and a passion for nature. All pieces are available for purchase, and a portion of the sales will be donated to The North Carolina Arboretum Society.

**TRANSFORMING NATURE**
Asheville-based artist Ron Morecraft blends fine art and technology in his new exhibit, Transforming Nature, on display daily April 20 – July 21 from 9 a.m. to 5 p.m. inside the Education Center. Using a giclée technique, Morecraft takes pictures of nature and superimposes them to create digitally painted artwork. His interest in “making a picture, not simply taking a picture” has led him to his pioneering work in digital photography. Morecraft’s new exhibit represents his transformation to capture, enhance and celebrate nature’s beauty.

A graduate of the Newark School of Fine Arts and the Academies of Fine Art in Milan and Rome, Morecraft spent 30 years as a special effects photographer, producing award-winning illustrations for clients ranging from CBS to Revlon. His works are created using archival inks, which are guaranteed to last up to 200 years, and are printed individually on a wide-format printer. Artworks are available for purchase, and a portion of the sales will be donated to The North Carolina Arboretum Society.

**COMPOSITIONS OF COLOR**
Color, light, paper and music are brought together at the Arboretum’s stunning summer art exhibit, Compositions of Color: Paper Art by Leo Monahan, on display daily May 25 – September 2 from 9 a.m. to 5 p.m. inside the Baker Exhibit Center. With nearly 60 years of experience, Monahan creates vibrant, bold paper sculptures by intricately cutting, folding, painting and texturizing paper of various weights and superimposing them to create an artistic dimensional collage that cannot be depicted on a flat canvas. In his new exhibit, Monahan showcases the complex composition of art and music through various representations of paper-made guitars and other images.

In coordination with Monahan’s exhibit, the Arboretum will showcase a special student photography exhibit inside the Exhibit Greenhouse featuring images of colors found in nature taken by participants in the Arboretum’s ecoEXPLORE Color Badge program.

From plants to animals to art, color will come alive at The North Carolina Arboretum this summer!
The Arboretum will transform into an oasis full of beauty and bliss as part of the 21st annual Asheville Orchid Festival, held April 6 – 7, inside the Education Center. Hosted by the Western North Carolina Orchid Society, this nationally known event features hundreds of carefully crafted orchid displays exhibited by world-class orchid growers and breeders along with regional orchid societies. This year’s event is entitled “An Orchid Expedition” and will feature educational programs led by orchid experts ranging across a variety of disciplines and subject matters. Orchids will also be available for purchase from vendors from Ecuador and across the United States and will include cutting-edge hybrids and rare varieties.

Prior to the public event, an exclusive Arboretum Society member-only preview will be held on Friday, April 5, from 4 to 7 p.m. in the Education Center. This preview is an excellent opportunity to meet growers and see the contenders competing for prizes in this American Orchid Society-sanctioned judging event. Due to the preview’s high popularity, members must pre-register to attend by visiting ncarboretumevents.org or calling Membership Services at 828-665-2492.

Admittance to the 2019 Asheville Orchid Festival on Saturday, April 6, and Sunday, April 7 (open 9 a.m. to 5 p.m. each day), is $5 per person, collected at the door. Children 12 and under are free. All fees support the non-profit Western North Carolina Orchid Society and its mission of sharing the excitement and joy of cultivating orchids and promoting orchid conservation. Standard parking fees apply to non-members.

The Arboretum is excited to announce two new special event series for the 2019 season.

Crafty Hour
Grab a glass and get hands-on while enjoying an afternoon at the Arboretum. Led by Melissa Thomas of Flora living boutique, each workshop will feature a new project design that enables participants to craft their own personalized botanical masterpiece while socializing with friends. Held the last Sunday of each month, each event is $67 for Arboretum members/$75 for non-members and includes a complimentary beverage, light food, supplies and full-day parking access to the Arboretum. Additional beverages can be purchased on-site. Tickets must be purchased in advance online at ncarboretum.org/events. For more information, please call the Events Department at 828-665-2492.

ArborEvenings
Relax and unwind at the Arboretum’s new “ArborEvenings” special evening series. Held every Thursday, April – October, from 6 to 9 p.m., visitors will see the Arboretum’s gardens come to light after dark while enjoying delicious food and tasty beverages. On the last Thursday of each month, live music will be played in the Heritage Garden. For more information, please visit ncarboretum.org/events.

Melissa Thomas (left), owner of Flora, will lead the Arboretum’s spring Crafty Hour event series.
If you need more good reasons to explore the Arboretum’s 434 acres, including more than 10 miles of trails and 65 acres of cultivated garden spaces, then please join us for Arboretum Reads, a community read-along of “The Nature Fix: Why Nature Makes Us Happier, Healthier and More Creative,” by Florence Williams, which highlights the science detailing the many benefits of time spent in nature; please see page 20 for more information. Or, if you’d rather go straight outside, please give these three options a try:

1. **Immerse Yourself in the Forest**
   Take a walk in the woods and soak up the sounds, scents and sights of nature while slowing your mind and body, and opening the heart. The Japanese practice of Shinrin Yoku – or forest bathing – is a great way to explore the outdoors. Start out slow on the Natural Garden Trail and work your way through the woods through a total immersive experience. If you’re looking for guidance, check out one of the upcoming Shinrin Yoku classes this April or July. More information can be found on page 21 or online at ncarboretum.org.

2. **Take the Kids to the Playing Woods**
   Watch your child or grandchild transform into a forest fairy or gnome in the Arboretum’s Playing Woods, located below the Plants of Promise Garden off of the Natural Garden Trail. Families are encouraged to use an assortment of found natural objects and build their very own fairy house or fort, make nature art and practice being a squirrel on the log beam and “stump jump.” This outdoor play area is a perfect place for children to practice independent exploration and learn about nature’s wonders. Be on the lookout this summer for more information on the Arboretum’s first-ever Fairy Friday event on Friday, July 19.

3. **Explore the Seasons in the Forest Meadow**
   Located below the Frederick Law Olmsted sculpture and Blue Ridge Court, the Forest Meadow offers an opportunity to explore the botanical diversity of trees and herbaceous groundcover plantings. Over the past two years, the Arboretum has installed a new pollinator way station along the grassy corridor with a stunning metal sculpture, “Life of the Monarch,” by local artist Grace Cathey, which features the different stages of the monarch butterfly’s life cycle. This natural area is a perfect place to experience nature’s ever-changing landscape. In winter and early spring, stand at the top of the meadow to see an alternative view of the Bent Creek Watershed. In April and May, discover an abundance of color, ranging from blooming dogwoods, cherry and redbud trees, as well as an assortment of cultivated and Dexter hybrid rhododendron species.

Do you have other favorite outdoor spots or experiences that weren’t mentioned on this list? Post your photos on Facebook or Instagram and include #ncarboretum to help us share with others.
MEMBERSHIP & GIVING

Willow Pond Phase I Renovation Underway

Work is now underway to renovate Willow Pond, a new outdoor educational site where the Arboretum is converting an old sediment collection basin into an innovative wetland complex that manages stormwater to benefit wetland plants, wildlife and water quality. As part of Phase I, the Arboretum is reconstructing the existing site to improve stormwater collection and management, dam safety and erosion control. Work for Phase 1 should be completed by spring, and public access is currently restricted.

To date, generous donors have contributed nearly $800,000, and another $400,000 is still needed to complete the remaining phases of the project. Gifts of every size are welcomed, and several name recognition opportunities are available. The Arboretum will also be recruiting volunteers to help install native plants, create new trails and assist with constructing the boardwalk during Phases II and III of the project. To learn more about donation opportunities, please contact Lisa Baker, donor relations manager, at lbaker@ncarboretum.org or 828-665-2492 ext. 221. Thank you for making the Willow Pond project possible!

Upcoming Member Events

Mark your calendars and join us for these upcoming special member events:

- Asheville Orchid Festival Member Preview – Friday, April 5, 4 – 7 p.m. Space is limited and pre-registration is required. Please register online at ncarboretumevents.org or by calling 828-665-2492.

- Member Plant Sales, May 22 – 23 & June 12 – 13. Choose from a selection of annuals, perennials, succulents and more. Upper-level members (Rhododendron and higher) will receive early access into the sales on May 22 and June 12.

- Compositions of Color Artist Reception, Thursday, May 30, 6 – 8 p.m. Join artist Leo Monahan and celebrate the opening of his newest exhibit, Compositions of Color. Available to Rhododendron-level members or higher. Please visit ncarboretumevents.org to register or call 828-665-2492.

Membership Services

Contact Member Services at membership@ncarboretum.org or 828-665-2492 to:

- Send us your corrected mailing address, especially if you have moved recently.
- Sign up for our monthly member eNewsletter containing valuable information about events, exhibits, education programs, Arboretum news and more.
- Sign up for electronic delivery of GROW magazine to save resources.

Membership Update

Members now have the opportunity to click an auto-renew feature when renewing their memberships online. By enrolling in this new program, members can easily renew their membership annually without having to re-enter their information each year. To enroll, please click the auto-renew box on your membership form online.

PLEASE THANK OUR COMMUNITY PARTNERS

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Buncombe County Tourism Development Authority
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North Carolina GlaxoSmithKline Foundation
RomanticAsheville.com
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Smoky Mountain Living Magazine
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New Belgium Brewing Company
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For more information on supporting the Arboretum as a Community Partner, please contact Winnie Hough, community partner program manager, at 828-665-2492 ext. 210 or whough@ncarboretum.org.
GROWING IN MIND

Adult Education Programs

In this spring season, the Arboretum invites you to consider the forest your classroom and enjoy the trails while learning. Classes conducted outdoors at the Arboretum include tree and bird identification, morning forest walks, an evening solstice hike and a new class combining yoga and hiking. Scott Dean, one of the Arboretum’s longtime instructors, will lead half-day adventures on and off the Arboretum property in wildflower identification. Brent Martin’s class on William Bartram and the writings of other southeastern naturalists will take you into the territory that they explored. For those of you ready to share your love of the outdoors with others, Blue Ridge Naturalist founder Jessie Wilder will offer a class on leading a guided nature walk.

Indoors you can learn from instructors Miles Cramer and Nanette Davidson about preparing tea and cooking with spices and edible flowers. Art classes center around a nature-journaling theme, including bookmaking and painting and drawing from nature. Colorful new classes in paper marbling taught by Anne Murray and cut paper illustrations taught by Debra Frasier are scheduled. Arboretum Reads, another new offering, is a community read-along of “The Nature Fix: Why Nature Makes Us Happier, Healthier and More Creative,” by Florence Williams, the basis for a series of discussions on current science backing up the benefits of time spent in nature.

Whether you are exploring the region for the first time or advancing your natural history knowledge, classes in the Arboretum’s Adult Education program may be your beginning to new connections and personal growth.

About Our Instructors

All instructor biographies are online as part of the class descriptions. The following instructors are new to the Arboretum and will be offering classes based on their interests and expertise:

Marc Archambault is a stone mason, artist and teacher based in Asheville. He practices traditional masonry techniques and creates natural stone mosaics, including the new mosaics in the Arboretum’s Stream Garden. He is the owner of Hammerhead Stone in Asheville, and will be joined by crewmember Jonathan Frederick, whose gifts with color and composition give life to walls and patios. Hammerheadstoneworks.com

Kevin Burke was introduced to birding while taking an ornithology class and has been birding every day since. He has a degree in resource recreation and tourism from the University of Idaho and honed his birding skills teaching environmental education. Kevin has led birding trips across the country to Washington’s San Juan Islands and Idaho’s backcountry, and abroad with trips to Portugal and Colombia.

Luke Cannon is an avid naturalist and ethnobotanist whose enthusiasm and extensive knowledge of the region’s plants, birds, insects, lichens, fungi and other organisms make him a popular teacher for students of all ages. He offers regular classes and walks in Western North Carolina with a mission to cultivate eco-literacy and reconnect people with the natural world. AstoundingEarth.com

Brad Daniel has been a college professor, wilderness trip leader and field instructor for over 34 years, using outdoor experiences to engage the heart, challenge the mind and nurture the spirit. He is a Certified N.C. Environmental Educator and Certified Interpretive Guide. He holds master’s degrees in biology/ecology and outdoor teacher education, and a Ph.D. in environmental studies. He is the executive director of 2nd Nature TREC. 2ndnaturetrec.com

Gwen Diehn is an emerita professor of art at Warren Wilson College and has taught art workshops for many years. She earned the master of fine arts degree from Vermont College of Art and her prints, mixed media pieces, drawings and artists’ books are in many public and private collections. She is the author of several books including “Simple Printmaking” and “Real Life Journals.” Her most recent book, “Drawing Ten Thousand Things,” was published in 2017. real-life-journals.blogspot.com

Debra Frasier is the author and illustrator of numerous children’s picture books, including the Parents’ Choice Gold Award for “On the Day You Were Born,” with over two million copies in print. Her book, “Miss Alaineus: A Vocabulary Disaster,” was an Oprah Summer Reading Choice and has inspired Vocabulary Parades in schools around the world. Debra is well known for her inspiring teaching methods and lively presentations. (*Miss Alaineus = miscellaneous!) debrafrazier.com

Karen Hurtubise and John Clarke grow ginger and turmeric for market on their large organic vegetable, flower and herb farm in Hayesville, N.C. They won a Southeast Regional Rodale “Organic Gardening” Garden-of-the-Year contest and have remained avid promoters of organic and sustainable agriculture ever since. Clarke recently retired from being the building and grounds director of the John C. Campbell Folk School, where Hurtubise currently serves as the resident artist in gardening and nature studies. They both teach gardening classes and grow a variety of fruits, vegetables, herbs and native plants. quallaberryfarm.com

Anne Murray has been studying the craft of bookbinding since 2006, and is passionate about practicing the crafts involved in making books, including the art of marbled paper. She has studied at the John C. Campbell Folk School, Penland School of Craft and Sawtooth School for Visual Art, as well as with well-known paper and book artists. She leads book repair workshops from her home studio and teaches workshops across the state. annesbooksandpapers.com

Patricia Spangler is a full-time artisan and teacher at The Language of Leaves in Asheville. She has studied with internationally acclaimed eco printers and dyers and participates in a number of juried art shows in Western North Carolina.

Vishnu Dass is an Ayurvedic doctor, clinical herbalist, author, educator and the director of Blue Lotus Ayurveda in Asheville. He is a graduate of the Ayurvedic Institute in Albuquerque, N.M., and is dean of education for the Ayurvedic Wellness Counselor Program at the Asheville School of Massage and Yoga. His knowledge in both Eastern and Western herbal traditions and years of clinical practice come together in his practical and inspired teaching style. bluelotusayurveda.com
## Class Schedule at a Glance

### APRIL

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<td>Exploring Watercolor B: A SPRING TREE IDENTIFICATION B</td>
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<td>Soil Health Checkup</td>
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<td>17</td>
<td>Armchair Travel Sketching: Building a Practice: A SIX-WEEK CLASS</td>
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<td>Dry Stack Stone</td>
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<td>23</td>
<td>Italic Calligraphy: A THREE-WEEK CLASS</td>
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<td>Spring Tree Identification A: A THREE-WEEK CLASS</td>
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<td>Methods of Ecological Gardening: A THREE-WEEK CLASS</td>
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<td>Sumi-e: Japanese Brush Painting: A SIX-WEEK CLASS</td>
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<td>Spring Plants of Interest</td>
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<td>Reading Ron Rash – “Something Rich and Strange”: A FIVE-WEEK CLASS</td>
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<td>Mysteries and Wonders of the Moon: A THREE-WEEK CLASS</td>
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<td>Spice it Up</td>
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<td>Cooking with Flowers A</td>
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<td>Cooking with Flowers B</td>
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<td>Spring Tree Identification B: A THREE-WEEK CLASS</td>
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<td>Identifying Regional Frogs by Sight and Sound</td>
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<td>The Truth about Birdfeeding: A THREE-WEEK CLASS</td>
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<td>Screech Owl Meet and Greet/Build an Owl House: A Hand-Tied Bouquet</td>
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<td>Exploring Watercolor C: A FIVE-WEEK CLASS</td>
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<td>Leading a Nature Walk: A THREE-WEEK CLASS</td>
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<td>Exploring Floral Design: A FIVE-WEEK CLASS</td>
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<td>15</td>
<td>Backyard Mini-Wildlife Refuge: May Book Discussion</td>
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<td>17</td>
<td>Growing and Using Turmeric, Ginger and Basil: A THREE-WEEK CLASS</td>
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<td>Hiking &amp; Yoga A: A TWO-DAY CLASS</td>
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<td>Deep Relaxation: Yoga Nidra A: A FOUR-WEEK CLASS</td>
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<td>Natural History Interpretation: A THREE-WEEK CLASS</td>
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<td>Photography Just for the Zen of It: A Two-Day Class</td>
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<td>Fire Ecology: A THREE-WEEK CLASS</td>
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<td>23</td>
<td>The Bonsai Exhibition Garden in Spring: Curator’s Talk and Tour: A TWO-WEEK CLASS</td>
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<td>Summer Gardening Tasks: Poics and Place: A Talk About Language, the Short Story and Writing About Home with Ron and Tom Rash: A SIX-WEEK CLASS</td>
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<td>Plants for Every Garden: A THREE-WEEK CLASS</td>
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<td>The Alexander Technique: Simple Sewn Books</td>
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<td>What’s Up Underground?: An Introduction to Soils: what’s up underground?: An Introduction to Soils:</td>
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<td>Summer Tree Identification A: Summer Tree Identification A: Introduction to Ayurveda</td>
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<td>Wildflower Hike A: Wildflower Hike A: Introduction to Ayurveda</td>
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<td>Hiking and Yoga C: Introduction to Ayurveda</td>
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<td>Iced Tea Workshop: Winter Solstice Hike: Introduction to Ayurveda</td>
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<td>11</td>
<td>Eco Printing: How to Plant a Garden: A TWO-DAY CLASS</td>
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<td>Reading Bartram and Southeastern Naturalists: A FOUR-DAY CLASS</td>
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<td>Birding in the Balsams: A THREE-WEEK CLASS</td>
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<td>Botany for Gardeners: A THREE-WEEK CLASS</td>
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<td>Wildflower Hike B: A THREE-WEEK CLASS</td>
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<td>Cut Paper Pictures: A THREE-WEEK CLASS</td>
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<td>Summer Flora Identification A: A TWO-DAY CLASS</td>
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<td>Summer Flora Identification B: A THREE-WEEK CLASS</td>
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<td>19</td>
<td>Exploring Floral Design: Flora Arrangements from Supermarket Bouquets: A THREE-WEEK CLASS</td>
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<td>21</td>
<td>Identifying and Understanding Invasive Plants: A THREE-WEEK CLASS</td>
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<td>A Solstice Hike in the Arboretum Forest: A THREE-WEEK CLASS</td>
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<td>22</td>
<td>Broom Making: A FIVE-WEEK CLASS</td>
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<td>22</td>
<td>Wildflower Hike B: A SIX-WEEK CLASS</td>
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<td>22</td>
<td>Botany by Family: A SIX-WEEK CLASS</td>
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<td>23</td>
<td>Fungal Families of the Blue Ridge: A THREE-WEEK CLASS</td>
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<td>Deep Relaxation: Yoga Nidra B: A THREE-WEEK CLASS</td>
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<td>25</td>
<td>Summer Qi Gong: A THREE-WEEK CLASS</td>
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<td>Healing Gardens: A THREE-WEEK CLASS</td>
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<td>Wildflower Hike D: A THREE-WEEK CLASS</td>
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<td>Paper Marbling: A THREE-WEEK CLASS</td>
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<td>“Loving Where You Live:” A Workshop for Readers &amp; Writers: A THREE-WEEK CLASS</td>
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<td>Coexisting with Black Bears: A FIVE-WEEK CLASS</td>
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<td>Woody Vines and Shrubs: A THREE-WEEK CLASS</td>
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<td>Arboretum Reads “The Nature Fix”: July Book Discussion: A THREE-WEEK CLASS</td>
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<td>Mountain Tree Trek: A TWO-DAY CLASS</td>
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<td>Hiking &amp; Yoga C: A THREE-WEEK CLASS</td>
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<td>Deep Relaxation: Yoga Nidra C: A THREE-WEEK CLASS</td>
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<td>23</td>
<td>Herbaceous Plant Propagation: A THREE-WEEK CLASS</td>
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<td>23</td>
<td>Exploring Floral Design: A Floral Centerpiece: A TWO-DAY CLASS</td>
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<td>23</td>
<td>Contemporary Calligraphy: Lowercase: A THREE-WEEK CLASS</td>
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<td>Birding By Ear: A THREE-WEEK CLASS</td>
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<td>Shinrin Yoku: Morning Forest Walk B: A THREE-WEEK CLASS</td>
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<td>Contemporary Calligraphy: Upperclass: A THREE-WEEK CLASS</td>
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Certificate and Continuing Education Programs

BLUE RIDGE NATURALIST CERTIFICATE OF MERIT

For those interested in developing skills and knowledge as a naturalist, The North Carolina Arboretum is proud to offer the Blue Ridge Naturalist (BRN) Certificate of Merit program, presenting courses that encourage environmental awareness and exploration of the Southern Appalachian ecosystem. The curriculum offers a series of core classes including zoology, botany, geology and plant identification, as well as elective classes in birding, fungi, stargazing and other specialized studies. Faculty include retired college professors, professional naturalists, researchers and individuals who have developed expertise in their field. Students may join the program at any time and take classes at their own pace, finishing up by designing a final project that applies their skills and knowledge for the benefit of the community. More information on the program is available on the website under Adult Education Programs or by calling.

BLUE RIDGE ECO-GARDENER CERTIFICATE OF MERIT

The North Carolina Arboretum is pleased to offer the Blue Ridge Eco-Gardener (BREG) Certificate of Merit program presenting courses on gardening topics that explore the ecological principles at play in creating and managing healthy, self-sustaining landscapes. Ecological gardening is a way of thinking about gardens and landscapes not as just a collection of plants, but more a community with complex interdependencies between plants, soils, environment and animals. Classes for credit are identified in the descriptions. Students come from all backgrounds, and instructors include farmers, landscape design professionals, Arboretum staff and business owners. More information on the program is available on the website under Adult Education Programs or by calling.

NORTH CAROLINA ENVIRONMENTAL EDUCATION CERTIFICATION

The following classes qualify for Criteria II (Outdoor Instructor-led Experiences) credit hours, as follows:

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<th>Course</th>
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<td>Ecology of the Blue Ridge</td>
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<td>Mosses and Liverworts</td>
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<td>All About Bluebirds</td>
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<td>Leading a Nature Walk</td>
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<td>What’s Up Underground? Intro to Soils</td>
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<td>Birding in the Balsams</td>
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CONTINUING EDUCATION FOR PROFESSIONALS

The following classes have been submitted for CEU credit with NC BOLA (North Carolina Board of Landscape Architects). Please check the website under adult education for more information on these classes and registration.

Ecological Design: Willow Pond
Instructors: Kim Williams and Owen Carson
Thursday, June 6; 9:15 a.m. to 12:15 p.m.
$52 Member / $57 Non-member
Three hours LA CEU

Designing for Diversity
Instructor: Susannah Horton
Thursday, June 6; 1:30 to 4:30 p.m.
$52 Member / $57 Non-member
Three hours LA CEU

Reading the Historic Landscape
Instructor: Glenn Stach
Friday, June 7; 9:15 a.m. to 12:15 p.m.
$52 Member / $57 Non-member
Three hours LA CEU

Stormwater: Looking at the Whole Picture
Instructor: Drake Fowler
Friday, June 7; 1:30 to 4:30 p.m.
$52 Member / $57 Non-member
Three hours LA CEU
Spring Flora Identification A
A SIX-WEEK CLASS
Instructor: Scott Dean
Tuesdays, April 2, 9, 23, 30, May 7, 14; 9:30 a.m. to 1:30 p.m.
$188 Member / $198 Non-member
Core requirement for BRN Certificate

In this field class, students will learn how to identify native mountain flora while studying plant families, the basics of plant community ecology, and the natural and cultural history of the flora of the Blue Ridge. “Newcomb’s Wildflower Guide” is required for this class as a reference.

Spring Warblers
Instructor: Simon Thompson
Thursday, April 11; 1 to 4 p.m.
$44 Member / $49 Non-member
Three hours elective credit for BRN Certificate

North Carolina is home to more than 40 species of warblers, which are among the most brilliantly colored and tuneful of songbirds. This class will provide an informative and enjoyable overview of warblers, allowing students opportunities to identify them and their distinctive songs.

Ecology of the Blue Ridge
A FIVE-WEEK CLASS AND FIELD TRIP
Instructor: Dan Lazar
Tuesdays, April 9, 16, 23, 30, May 7, 14; 12:45 to 4:45 p.m.
$178 Member / $188 Non-member
Core requirement for BRN Certificate

Discover why the Southern Appalachians are home to more tree species than all of Europe. Students will discuss the lingering effects of extinct ice age animals on today’s landscape and uncover the complex interactions between familiar organisms and their natural environment. The course meets for indoor lectures during the first five weeks and concludes with a field trip, weather permitting.

Mosses and Liverworts
Instructor: Jim Goldsmith
Saturday, April 13; 9:30 a.m. to 4:30 p.m.
$59 Member / $69 Non-member
Six hours elective credit for BRN Certificate

This class will be divided between walks around the Arboretum and classroom discussion of the characteristics and terminology necessary to identify common species of mosses and liverworts. Students will learn collection techniques and look at examples from this area. Students should dress comfortably for walking some Arboretum trails and bring paper and pencil and a hand lens, if available.

Woodpeckers
Instructor: Kevin Burke
Thursday, April 18; 1 to 4 p.m.
$44 Member / $49 Non-member
Three hours elective credit for BRN Certificate

Why do woodpeckers drum on gutters? Are they really “eating” the house? The seven species of woodpeckers in Western North Carolina range from the tiny downy to the huge pileated. This class offers an in-depth study of these fascinating birds.

The recent upsurge in bluebird populations can largely be attributed to a movement of volunteer citizens establishing and monitoring bluebird nest boxes. View a video of an active nest box and a slide show on threats to the bluebird’s survival. Students should wear sturdy shoes and appropriate clothing for an outdoor demonstration on how to monitor active bluebird nest boxes.

All About Bluebirds
Instructor: Joe Sanders
Tuesday, April 23; 9:15 a.m. to 12:15 p.m.
$44 Member / $49 Non-member
Three hours elective credit for BRN Certificate

When thinking of spring flowers, our attention is often turned toward the numerous herbaceous plants on the forest floor. However, many species of mountain trees are also blooming. In this class, students will investigate tree pollination strategies and learn about identifying trees by their flowers, buds and bark. Weather permitting, the class will move outdoors to walk the Arboretum grounds and practice identification skills.

Mosses and Liverworts continued on page 14
Mysteries and Wonders of the Moon

A THREE-WEEK CLASS
Instructor: Stephan Martin
Wednesdays, May 1, 8, 15; 6:30 to 9 p.m.
$89 Member / $99 Non-member
Five hours elective credit for BRN Certificate

This class will consider patterns in the moon’s movement through the sky and examine its influences on the natural world. Also considered is modern science’s view of the moon’s nature, origin and structure. The class will include practice identifying features on the moon with a small telescope. Students may bring their own binoculars, spotting scopes or other visual aids for observing sessions.

Identifying Regional Frogs by Sight & Sound

Instructor: Patrick Brannon
Tuesday, May 7; 1 to 3 p.m.
$34 Member / $39 Non-member
Two hours elective credit for BRN Certificate

Learn about the biology of regional frogs and how to identify them by sight and sound. This class looks at the calls of the different species from early spring through late summer, and teaches students to monitor seasonal changes in the types, numbers or calling times that may be indicators of environmental effects, such as global climate change.

Leading a Nature Walk

Instructor: Jessie Wilder
Saturday, May 11 (Rain Date: May 18); 9:30 a.m. to 12:30 p.m.
$49 Member / $59 Non-member

Want to share your love of the outdoors with others? With the Arboretum forest as classroom, students will learn simple tips for leading engaging nature walks that encourage curiosity and discovery. Wear shoes and clothing suitable for a walk on the Arboretum grounds.

Hummingbirds

Instructor: Chris Jacquette
Thursday, May 16; 1 to 4 p.m.
$44 Member / $49 Non-member
Three hours elective credit for BRN Certificate

Everyone loves hummingbirds. Learn many fascinating facts about these unique birds, including what makes hummingbirds “hum,” as well as their migration patterns and breeding cycles. Also included are tips on flowers to plant and feeding techniques to attract hummingbirds to the home landscape.

Venomous Snakes of the Carolinas

Instructor: Carlton Burke
Friday, May 17; 9:15 a.m. to 12:15 p.m.
$44 Member / $49 Non-member
Three hours elective credit for BRN Certificate

In this class, students will learn to separate facts from myths about the various species of venomous snakes found in North and South Carolina. What to do when snakes are encountered in the wild and snakebites are also covered. Students will have the chance to learn basic identification skills through viewing live venomous snakes in the classroom.

Natural History Interpretation

A FOUR-WEEK CLASS
Instructor: Brad Daniel
Tuesdays, May 21, 28, June 4, 11; 9:15 a.m. to 12:15 p.m.
$88 Member / $98 Non-member
Core requirement for BRN Certificate

This course will introduce the basic principles of interpreting the natural world to inspire curiosity in our natural and cultural heritage. Learn how to create nature education talks or walks that are purposeful, enjoyable, informative and organized. Students will be given an opportunity to develop their own programs and practice their presentation and communication skills.

Fire Ecology

A TWO-WEEK CLASS
Instructor: Dan Lazar
Wednesdays, May 22, 29; 12:45 to 4:45 p.m.
$69 Member / $79 Non-member
Seven hours elective credit for BRN Certificate

How do wild animals survive a wildfire? Why do some species of trees remain alive while others perish in the flames? How do forests recover? This class is an introduction to the fundamentals of fire ecology in the Blue Ridge with a field trip to observe changes in forest community structure at a recent burn site.

What’s Up Underground?
An Introduction to Soils

Instructor: Laura Lengnick
Tuesday, June 4; 9:30 a.m. to 12:30 p.m.
$44 Member / $49 Non-member
Three hours elective credit for BRN Certificate

Soils are the great regulator of ecosystems: the only place in nature where rocks, water, air and life all come together to form the living skin of the earth. This field-based class covers the characteristics of soils – texture, structure, and color – that indicate how a particular place will respond to different human impacts and environmental conditions.
Summer Tree Identification A  
Instructor: Carlton Burke  
Wednesday, June 5; 9:15 a.m. to 12:15 p.m.  
$44 Member / $49 Non-member  
Core requirement for BRN Certificate

Summer Tree Identification B  
Instructor: Marc Williams  
Saturday, July 13; 1:30 to 4:30 p.m.  
$44 Member / $49 Non-member  
Core requirement for BRN Certificate

In this class, students will learn how to identify many of the area’s tree species based on their habitat preferences, individual characteristics, including leaves, and their uses by humans and wildlife. The class will start indoors with a lecture and then move outside for an easy hike. Students should dress appropriately for the weather and wear walking shoes.

Wildflower Hike A  
Instructor: Scott Dean  
Saturday, June 8; 9:30 a.m. to 1:30 p.m.  
$44 Member / $49 Non-member

Wildflower Hike B  
Instructor: Scott Dean  
Friday, June 14; 9:30 a.m. to 1:30 p.m.  
$44 Member / $49 Non-member

Wildflower Hike C  
Instructor: Scott Dean  
Saturday, June 22; 9:30 a.m. to 1:30 p.m.  
$44 Member / $49 Non-member

Wildflower Hike D  
Instructor: Scott Dean  
Friday, June 28; 9:30 a.m. to 1:30 p.m.  
$44 Member / $49 Non-member

Participate in one or all four of these walks, designed to practice basic wildflower identification and study plant ecology at selected locations on the Arboretum grounds or off-site. Students will be notified where to meet prior to each class. Wear shoes and clothing appropriate for hiking, and bring a wildflower identification guide. “Newcomb’s Wildflower Guide” and “Wildflowers of Tennessee, the Ohio Valley and the Southern Appalachians” are recommended as references.

Birding in the Balsams  
Instructor: Kevin Burke  
Thursday, June 13; 7:30 a.m. to 2 p.m.  
$59 Member / $69 Non-member  
Five hours elective credit for BRN Certificate

This early morning birding trip will look for some of the area’s most exciting birds in the higher elevations, including many species of warblers, vireos and the hard-to-identify Empidonax flycatchers. Students will meet at Graveyard Fields parking lot (about a half-hour drive from the Arboretum) off the Parkway at 7:30 a.m. The class will drive as far as Heintooga, the most reliable spot in the last few years for red crossbills. Options to carpool to Graveyard Fields will be sent to students before class. Students should bring binoculars, birding guides, and food and water for the day.

Summer Flora Identification A  
A SIX-WEEK CLASS  
Instructor: Scott Dean  
Tuesdays, June 18, 25, July 2, 9, 16, 23; 9:30 a.m. to 1:30 p.m.  
$188 Member / $198 Non-member  
Core requirement for BRN Certificate

In this field class, students will learn to identify mountain flora using a non-technical keying system. The focus is on summer wildflowers but students will also work with trees and become familiar with technical dichotomous keys as a means of identification. “Newcomb’s Wildflower Guide” and “Wildflowers of Tennessee, the Ohio Valley and the Southern Appalachians” are recommended references. After the first class, the group will meet each week at a different trailhead.

Fungal Families of the Blue Ridge  
Instructor: Luke Cannon  
Sunday, June 23; 10 a.m. to 4 p.m.  
$59 Member / $69 Non-member  
Five hours elective credit for BRN Certificate

The Southern Appalachians offer an exceptional diversity of fascinating and ecologically-important fungi. Students will start the day in the classroom, learning how to identify each of the 12 most common fungal families and their preferred habitats and ecological connections, before moving outside for the afternoon to examine specimens in the field. Come prepared to learn, hike (a little) and have fun! Students should dress appropriately for the weather and wear walking shoes.

Natural History continued on page 16
Coexisting with Black Bears
Instructor: Tanya Poole
Wednesday, July 17; 10 a.m. to Noon
$34 Member / $39 Non-member
Two hours elective credit for BRN Certificate
Did you know black bears can eat up to 20,000 calories a day in the fall? Learn why they are eating so much and how they manage to thrive in Western North Carolina in close proximity to so many people. The instructor will discuss the BearWise strategies recommended by wildlife experts that will help people better coexist with the region’s amazing black bears.

Woody Vines and Shrubs
Instructor: Carlton Burke
Thursday, July 18; 9:15 a.m. to 1:15 p.m.
$59 Member / $69 Non-member
Four hours elective credit for BRN Certificate
The Southern Appalachians are home to dozens of shrubs and woody vines, many of which are often overlooked and unknown by the average person. This class helps students gain the skills to identify many of these plants and learn about their importance to the ecology of mountain forests.

Birding by Ear
Instructor: Kevin Burke
Thursday, July 25; 9:30 a.m. to 12:30 p.m.
$44 Member / $49 Non-member
Three hours elective credit for BRN Certificate
Learn to locate and identify the unique sounds of each bird. The instructor will share a variety of field techniques to help students increase their birding skills. Class will start indoors and then move outside for some practice listening to bird songs.

Mountain Tree Trek
Instructor: Carlton Burke
Friday, July 19; 9:15 a.m. to 4:15 p.m.
$69 Member / $79 Non-member
Five hours elective credit for BRN Certificate
Western North Carolina is home to an incredible diversity of tree species due to the various elevational changes and corresponding habitats of our mountain region. Students will meet at the Arboretum and carpool for the day, driving along the Blue Ridge Parkway. The group will see tree species found across a variety of habitats and different elevations, from river floodplains to cool mountaintops.

Soil Health Checkup
Instructor: Laura Lengnick
Friday, April 12; 9:30 a.m. to Noon
$34 Member / $39 Non-member
Two hours elective credit for BREG Certificate
Learn why healthy soils are critical to the well-being of our communities and how to cultivate landscapes that promote soil health. This practical, hands-on course will cover how to conduct simple but effective soil monitoring, using tools found in most kitchens. Learn how to use the test results to create an effective management plan to improve cultivation of a living soil regardless of the challenges of any particular location or landscape.

Pruning Woody Plants in the Home Landscape
Instructor: Arthur Joura
Tuesday, April 2; 1:30 to 4:30 p.m.
$34 Member / $39 Non-member
Three hours elective credit for BREG Certificate
Correctly pruning woody trees and shrubs improves their general appearance and promotes better health. Pruning done poorly, however, creates problems. Students will learn about three critical elements of correct pruning — tools, techniques and timing — as well as aesthetic considerations. The Arboretum’s Bonsai Exhibition Garden will serve as an outdoor classroom to exemplify what good pruning can do in a landscape. The class also includes a live demonstration in which a specimen tree will be thoroughly pruned in preparation for the growing season.

The Bonsai Tray Landscape: A Lecture/Demonstration
Instructor: Arthur Joura
Thursday, April 11; 5 to 7:30 p.m.
$12 Member / $17 Non-member
The Arboretum’s bonsai collection is noted for its stunning tray landscapes—miniature living compositions depicting natural scenes typical of the Blue Ridge, grown on slabs or in shallow containers and featuring plants of differing species. The class will offer a unique opportunity to see a new tray landscape constructed and learn about design considerations involved, including the selection and preparation of plants and other materials used in the composition.
Dry Stack Stone
Instructor: Marc Archambault
Wednesday, April 17; 9:30 a.m. to 4:30 p.m.
$134 Member / $144 Non-member
Six hours elective credit for BREG Certificate

After a classroom discussion of basic principles and techniques, and considerations for planning retaining and free-standing stone walls, the class will move outside for hands-on practice building a dry-stack retaining wall at the Arboretum’s outdoor stonework classroom. Participants should wear sturdy shoes and bring work gloves, protective eyewear and water.

Designing with Native Plants
Instructor: Lisa Wagner
Thursday, April 18; 10 a.m. to Noon
$34 Member / $39 Non-member
Two hours elective credit for BREG Certificate

Using native plants in ways that create pleasing and attractive gardens can be as simple as looking to nature for inspiration. Learn to combine plants that grow together in their natural landscapes to elevate both the enjoyment of a garden and successful stewardship of a landscape. The program will include a presentation and walk to discuss native plant examples found in the Arboretum’s gardens.

Methods of Ecological Gardening
A THREE-WEEK CLASS
Prerequisite: Principles of Ecological Gardening
Instructor: Nina Shippen
Wednesdays, April 24, May 1, 8; 9:30 a.m. to 12:30 p.m.
$88 Member / $98 Non-member
Core requirement for BREG Certificate

Ecology-based methods used in design, site assessment, planting and management of a garden are the emphasis of this class, the second part of the foundation requirement for the Blue Ridge Eco-Gardener Certificate of Merit program. This class will introduce regional gardening considerations such as slopes, drought and water management, and what it means to garden in an era of rapid climate change.

Gardening for Joy
Instructor: Martha Rollefson
Wednesday, April 24; 1:30 to 3:30 p.m.
$34 Member / $39 Non-member

Beginning and experienced gardeners alike can benefit from taking a step back from the single plant to view the whole plot. This discussion-based class will be organized around sharing tips and guidelines to make gardening more enjoyable. Students will complete a garden coaching questionnaire to determine what works and doesn’t work in their own gardens.

Spring Plants of Interest
Instructor: Clara Curtis
Wednesday, May 1; 1 to 4 p.m.
$34 Member / $39 Non-member
Core requirement for BREG Certificate

These classes, a combination of presentation and outdoor exploration, will focus on plants that are at their best in spring and summer, with a special nod to color in honor of the Arboretum’s 2019 “Covered in Color” celebration.

Summer Plants of Interest
Instructor: Clara Curtis
Tuesday, July 16; 1 to 4 p.m.
$34 Member / $39 Non-member
Core requirement for BREG Certificate

The screech owl is one of our most common owl species. These little owls normally nest in hollow tree cavities, but they can often be enticed to nest in man-made nesting boxes. Students in this class will put together an owl house designed specifically for screech owls and meet a live screech owl in the classroom.

The Truth about Bird Feeding
Instructor: Chris Jacquette
Thursday, May 9; 1 to 4 p.m.
$44 Member / $49 Non-member
Three hours wildlife credit for BREG Certificate

This is a crash course on all things related to feeding birds. Learn about different seed preferences, feeders and hardware to successfully attract the various species in the area and deterants for seed-stealing squirrels and bears.

Screech Owl Meet and Greet — Build an Owl House
Instructor: Carlton Burke
Friday, May 10; 9:15 a.m. to 12:15 p.m.
$95 Member / $105 Non-member
Three hours wildlife or elective credit for BREG Certificate

Horticulture and Landscape Design continued on page 18
Backyard Mini-Wildlife Refuge
Instructor: Carlton Burke
Wednesday, May 15; 9:15 a.m. to 12:15 p.m.
$59 Member / $69 Non-member
Three hours wildlife or elective credit for BREG Certificate
The impacts of housing, recreation and commerce often overtake previously established wildlife habitats on the land. Learn how to share and coexist with creatures of the wild in a home landscape. Topics covered include selecting bird and animal-friendly plantings and using gardening techniques that aid without endangering wildlife neighbors.

Growing and Using Turmeric, Ginger and Basils
Instructors: Karen Hurtubise and John Clarke
Saturday, May 18; 9:30 a.m. to Noon
$54 Member / $59 Non-member
Two hours elective credit for BREG Certificate
Learn how to grow, store and use these diverse, tropical culinary and folk medicinal plants of the historical Asian spice trade. Understand organic growing principles and learn about seed and rhizome varieties like Holy Basil, Bubba Blue Ginger and Mango Turmeric. Learn how to make and get a chance to taste teas, vinegars, candied ginger and more.

The Bonsai Exhibition Garden in Spring: Curator’s Talk and Tour
Instructor: Arthur Joura
Thursday, May 23; 5 to 6:30 p.m.
$12 Member / $17 Non-member
Using plants native to the Blue Ridge, the Arboretum’s Bonsai Exhibition Garden brings the thousand-year tradition of bonsai home to the mountains of Western North Carolina. Join this after-hours tour of the garden with the bonsai curator for a personal and informative overview of the art of bonsai and the Arboretum’s own creative approach. Foliage is at its freshest at this time of year, and flowers will likely be blooming in the garden landscape and on select bonsai.

Summer Gardening Tasks
Instructors: Karen Hurtubise and John Clarke
Wednesday, May 29; 10 a.m. to Noon
$34 Member / $37 Non-member
Core requirement for BREG Certificate
Garden maintenance takes place all year long and timing is critical to certain garden tasks. Each seasonal class offers tips, projects and considerations for activities such as fertilizing, planting, pruning, pest control, planning, clearing and cleaning for gardening year round.

Plants for Every Garden
A THREE-WEEK CLASS
Instructor: Nina Shippen
Fridays, May 31, June 7, 14;
10 a.m. to Noon
$68 Member / $78 Non-member
Six hours elective credit for BREG Certificate
Gardeners in Western North Carolina face a daunting array of growing conditions that can differ wildly in temperature, light, moisture and soil. This class provides tips for choosing plants that are suitable for the region’s vastly dissimilar sites and microclimates, and offers suggestions for discovering the type of garden—perennial borders, shade gardens, rain gardens, wet and dry meadows, and bird and pollinator habitats—best suited for any given site.

Botany for Gardeners
A THREE-WEEK CLASS
Instructor: Alexandra Holland
Thursdays, June 13, 20, 27;
9:30 a.m. to 12:30 p.m.
$69 Member / $79 Non-member
Core requirement for BREG Certificate
Make dinner. Stay attractive. Nurture the baby. Fight off predators. Find water. Stay warm. Deal with the neighbors. In this class, students will explore how plants handle these daily challenges using and modifying only leaves, stems and roots. The class will also cover plant structure, function, evolution and classification.

Identifying and Understanding Invasive Plants
Instructor: Marc Williams
Friday, June 21; 1:30 to 4:30 p.m.
$34 Member / $39 Non-member
Three hours elective credit for BREG Certificate.
This class offers an in-depth look at identifying and understanding plant family patterns and the ethnobotanical uses of some of the most common, exotic invasives of the southeastern U.S. The instructor will provide a list of invasive plants found in the region and emphasize opportunities to employ these plants effectively.

Botany by Family
Instructor: Marc Williams
Saturday, June 22; 1000 to 4:00 p.m.
$34 Member / $39 Non-member
Three hours elective credit for BREG Certificate.
Learning plant family patterns can greatly aid in demystifying the “green wall” of species around us. The class will reinforce plant identification skills by observing family patterns such as leaf, flower and fruit types to understand the major plants comprising southeastern flora and their ecological and ethnobotanical applications.

Healing Gardens
Instructor: Nina Shippen
Wednesday, June 26;
9:15 a.m. to 12:15 p.m.
$34 Member / $39 Non-member
Three hours elective credit for BREG Certificate.
Gardens have been associated throughout history with restoration and healing. This class examines their role in health and wellness, and will cover current research on positive impacts. Students will learn the essentials for creating a successful therapeutic garden and how to apply them in residential and community settings.

Herbaceous Plant Propagation
Instructor: June Jolley
Tuesday, July 23; 1 to 4 p.m.
$67 Member / $77 Non-member
Three hours elective credit for BREG Certificate.
This class covers herbaceous plant propagation from seeds, cuttings and divisions. Propagating grasses, perennials, and landscape and house plants will be discussed with plenty of hands-on practice of sowing seeds and propagating cuttings to take home. Students should bring pruners and gardening gloves.
FINE ART AND CRAFT

Exploring Watercolor B
Instructor: Susan Lingg
Thursday, April 11; 1 to 4 p.m.
$58 Member / $68 Non-member

Exploring Watercolor C
Instructor: Susan Lingg
Saturday, May 11; 1 to 4 p.m.
$58 Member / $68 Non-member

Blend shapes, splatter color and add texture in small watercolor studies. Each of these classes, designed for all levels, will offer a different approach to the tools and techniques unique to watercolor. All supplies are included in the course fee.

Armchair Travel Sketching
—Building a Practice:
A SIX-WEEK CLASS
Instructor: Gwen Diehn
Wednesdays, April 17, 24, May 1, 8, 15, 22;
1:30 to 4:30 p.m.
$118 Member / $128 Non-member
Learn to draw with the fresh eyes of a world traveler without leaving home. Basic drawing techniques and skills will be taught to encourage a life-enriching practice of drawing. Each week’s class will provide opportunities to train the eye and sketch while walking the Arboretum trails. Students will make their own sketchbooks in the first class as a way to begin their armchair travel practice.

Italic Calligraphy
A THREE-WEEK CLASS
Instructor: Catherine Langsdorf
Tuesdays, April 23, 30, May 7;
1:30 to 4:30 p.m.
$79 Member / $89 Non-member
Italic is one of the most recognized traditional calligraphic styles, noted for its elegance and legibility. In this basic course, students will learn how to use the broad-edge calligraphy tool to create both lower and upper case letters. Students will be sent a list of supplies needed for the class.

Sumi-e: Japanese Brush Painting
A SIX-WEEK CLASS
Instructor: Diana Christopherson
Tuesdays, April 30, May 7, 14, 21, 28,
June 4; 12:30 to 2:30 p.m.
$99 Member / $109 Non-member
Sumi-e is exemplified by the artistic use of fundamental brush strokes of simple lines and dots that are utilized to capture the shifting images of our perceptual world. Experienced and beginner students will work on their own level in this centuries-old tradition. Students will be sent a supply list prior to the class.

Reading Ron Rash
— “Something Rich and Strange”
A FIVE-WEEK CLASS
Instructor: Tom Rash
Wednesdays, May 1, 8, 15, 22, 29;
6 to 8 p.m.
$75 Member / $85 Non-member
“If you go deep enough into one place, you hit the universal,” says acclaimed author Ron Rash. Consider the particular and universal aspects of place, use of poetic language, plot and character, and learn to read the short story form through the eyes of a professional editor. Each class is organized around the close reading of a story included in the collection, “Something Rich and Strange” by Ron Rash. Class registration includes admission to the special event featuring a conversation with Ron Rash on Wednesday, May 29, from 6 to 8 p.m.

Travel Photography
Instructor: Rick Daley
Wednesday, May 8; 5:30 to 8:30 p.m.
$44 Member / $49 Non-member
Would you like to come home from your next trip with better photos? This class will provide ideas and tips for making photographic memories more exciting using a phone, a point and shoot, or a large digital camera. Topics covered will include equipment; techniques when shooting from cars, trains, boats or planes; ideas for themes for interesting collections; and picture taking in all kinds of weather.

Designing with Flowers
A THREE-WEEK CLASS
Instructor: Theresa Clower
Thursdays, May 9, 16, 23; 1 to 4 p.m.
$248 Member / $258 Non-member
Learn the fundamentals of form necessary to create round, triangular or parallel floral designs. Experiment with shape, line and symmetry while working with seasonal materials to take home a beautiful floral design each week. Flowers, vases and all materials will be provided. Students should bring floral snips to each class.

A Hand-Tied Bouquet
Instructor: Niki Irving
Tuesday, May 14; 1 to 3 p.m.
$75 Member / $79 Non-member

Floral Arrangements from Supermarket Bouquets
Instructor: Theresa Clower
Wednesday, June 19; 1:30 to 3:30 p.m.
$75 Member / $79 Non-member

A Floral Centerpiece
Instructor: Niki Irving
Tuesday, July 23; 5:30 to 7:30 p.m.
$75 Member / $79 Non-member
Create beautiful floral arrangements from purchased flowers or your own homegrown. Each class will focus on different design principles and skills and students may take one class or all three. Gain the confidence and experience to plan a DIY wedding or other special event, or just have fun with flowers. All flowers and materials will be provided. Students should bring floral snips to class.

Fine Art and Craft continued on page 20
Arboretum Reads “The Nature Fix”

May Book Discussion
Instructor: Rebecca Caldwell
Thursday, May 16; 5:30 to 7 p.m.
$9 Member / $14 Non-member

June Book Discussion
Thursday, June 20; 5:30 to 7 p.m.
$9 Member / $14 Non-member

July Book Discussion
Thursday, July 18; 5:30 to 7 p.m.
$9 Member / $14 Non-member

Join one or all of these facilitated discussions of the first Arboretum Reads choice of “The Nature Fix: Why Nature Makes Us Happier, Healthier, and More Creative” by Florence Williams. Delving into completely new research, Williams uncovers the powers of the natural world to improve health, promote reflection and innovation, and ultimately strengthen our relationships. With modern life shifting dramatically indoors, these ideas – and the answers they yield – are more urgent than ever. Access to research and related materials will be provided in advance of each discussion session. Look for an Arboretum Reads special event in the fall.

Poetics and Place: A Talk About Language, the Short Story, and Writing with Ron and Tom Rash
Wednesday, May 29; 6 to 8 p.m.
$24 Member / $29 Non-member

The most powerful writing feels like an intimate conversation between the reader and the writer, unfolding in a place both strange and familiar. This conversation between brothers considers the challenges of remaining true to a place while recreating it fictionally. Featuring award-winning author Ron Rash, the John Parris Distinguished Professor of Appalachian Studies at Western Carolina University, and Tom Rash, the author’s first reader and a professional editor.

Simple Sewn Books: More Variations on a Theme
Instructor: Rebecca Caldwell
Saturday, June 1; 10 a.m. to 4 p.m.
$69 Member / $79 Non-member

Spend the day learning how to make a variety of simple folded and sewn books using handmade and decorative papers. The class will be geared towards beginners, covering basic bookmaking tools and techniques, with an introduction to the rich history of bookbinding and papermaking. All materials and tools are provided.

Eco Printing
Instructor: Patricia Spangler
Tuesday, June 11; 10 a.m. to 4 p.m.
$69 Member / $79 Non-member

Eco printing is a process of direct contact printing using leaves, plants and heat to transfer image and color onto fabric. This introductory course covers fabric preparation, mordants, tannins, modifiers and plant selection. After sampling different techniques and methods, students will print a silk scarf as their final project. All materials are provided. Students should bring rubber gloves.

Cut Paper Pictures
Instructor: Debra Frasier
Saturday, June 15; 9:30 a.m. to 12:30 p.m.
$59 Member / $69 Non-member

Cut paper pictures are made simply by cutting bits of paper and assembling them into new compositions. Learn how to make pictures of plants and animals that are lively, colorful and contemporary. On learning the instructor’s simple method, students will be able to continue to create on their own. Students should bring small, sharp scissors. All other materials will be provided.

Broom Making:
Cobwebs and Whisks
Instructor: Marlow Gates
Saturday, June 22; 9:15 a.m. to 4 p.m.
$89 Member / $99 Non-member

This class will allow students of all levels to make three practical brooms: a cobweb broom, a whisk broom and either a pot scrubber or cake tester. Moderate upper body and hand strength are required. Students are asked to bring a sharp pocket or utility knife if they have one. All other supplies will be provided.

Reading Bartram and Southeastern Naturalists
A FOUR-DAY CLASS AND FIELD TRIP
Instructor: Brent Martin
Tuesday, June 11 - Friday, June 14; 10 a.m. to 4 p.m.
$179 Member / $189 Non-member

The writings of significant naturalists who explored the region will be discussed with a focus on 18th century naturalist and artist William Bartram. Walks on the Arboretum grounds will allow students to see many of the plant, tree and bird species these naturalists described. An all day field trip will follow Bartram’s journey into the Little Tennessee River Valley. “Journeys Through Paradise” by Gail Fishman and “Travels” by William Bartram (Harper’s edition) are required for this class.

Photography Just for the Zen of It
A TWO-DAY CLASS
Instructor: Rick Daley
Tuesday, Wednesday, May 21, 22; 9:30 a.m. to 4 p.m.
$89 Member / $99 Non-member

Applying Zen aesthetic principles – appreciation of the ordinary, simplicity, elegance, relishing ambiguity and mystery, and celebrating nature – to photography can help students go beyond the usual rules of composition. This class, suited for all levels, will include instruction both in the classroom and outdoors with time to shoot at the Arboretum. Students should bring their own cameras.

Poetics and Place: A Talk About Language, the Short Story, and Writing with Ron and Tom Rash
Wednesday, May 29; 6 to 8 p.m.
$24 Member / $29 Non-member

The most powerful writing feels like an intimate conversation between the reader and the writer, unfolding in a place both strange and familiar. This conversation between brothers considers the challenges of remaining true to a place while recreating it fictionally. Featuring award-winning author Ron Rash, the John Parris Distinguished Professor of Appalachian Studies at Western Carolina University, and Tom Rash, the author’s first reader and a professional editor.

Simple Sewn Books: More Variations on a Theme
Instructor: Rebecca Caldwell
Saturday, June 1; 10 a.m. to 4 p.m.
$69 Member / $79 Non-member

Spend the day learning how to make a variety of simple folded and sewn books using handmade and decorative papers. The class will be geared towards beginners, covering basic bookmaking tools and techniques, with an introduction to the rich history of bookbinding and papermaking. All materials and tools are provided.

Eco Printing
Instructor: Patricia Spangler
Tuesday, June 11; 10 a.m. to 4 p.m.
$69 Member / $79 Non-member

Eco printing is a process of direct contact printing using leaves, plants and heat to transfer image and color onto fabric. This introductory course covers fabric preparation, mordants, tannins, modifiers and plant selection. After sampling different techniques and methods, students will print a silk scarf as their final project. All materials are provided. Students should bring rubber gloves.

Cut Paper Pictures
Instructor: Debra Frasier
Saturday, June 15; 9:30 a.m. to 12:30 p.m.
$59 Member / $69 Non-member

Cut paper pictures are made simply by cutting bits of paper and assembling them into new compositions. Learn how to make pictures of plants and animals that are lively, colorful and contemporary. On learning the instructor’s simple method, students will be able to continue to create on their own. Students should bring small, sharp scissors. All other materials will be provided.

Broom Making:
Cobwebs and Whisks
Instructor: Marlow Gates
Saturday, June 22; 9:15 a.m. to 4 p.m.
$89 Member / $99 Non-member

This class will allow students of all levels to make three practical brooms: a cobweb broom, a whisk broom and either a pot scrubber or cake tester. Moderate upper body and hand strength are required. Students are asked to bring a sharp pocket or utility knife if they have one. All other supplies will be provided.
Paper Marbling
Instructor: Anne Murray
Saturday, June 29; 9:30 a.m. to 4:30 p.m.
$89 Member / $99 Non-member
Learn the magic of paper marbling with acrylic paint. Create both traditional and contemporary designs by floating pigments on water. Participants will produce many decorated sheets suitable for framing or for a variety of other artistic uses. No experience necessary. Students should bring rubber gloves. All other supplies will be provided.

“Loving Where You Live” – A Workshop for Readers & Writers
A FOUR-WEEK CLASS
Instructor: Thomas Rain Crowe
Saturdays, June 29, July 6, 13, 20; 10:30 a.m. to 12:30 p.m.
$89 Member / $99 Non-member
This class welcomes students of all levels and genres to read and write about their lives and the places that have inspired them. Students are encouraged to pursue and value their writing as a legacy for future generations. The book “Carolina Writers at Home” is used as a foundation for discussion and inspiration for students’ writing. Students should bring writing materials and paper.

Contemporary Calligraphy: Lowercase
Instructor: Catherine Langsdorf
Tuesday, July 23; 5:30 to 7:30 p.m.
$39 Member / $49 Non-member
Discover a contemporary calligraphy style for use with cards, envelopes, signs and gift items. This lively class will help students gain experience in forming lowercase letters and working with a pointed brush marker. The instructor’s list of required supplies will be sent to students upon registration.

Contemporary Calligraphy: Uppercase
Instructor: Catherine Langsdorf
Tuesday, July 30; 5:30 to 7:30 p.m.
$39 Member / $49 Non-member
Begin or continue an exploration of the contemporary style with this fun, fast-paced class that focuses on the drills and skills to create capital or uppercase letters with the pointed brush marker. The instructor’s list of required supplies will be sent to students upon registration.

Spice it Up!
Instructor: Nanette Davidson
Friday, May 3; 1 to 4 p.m.
$89 Member / $99 Non-member
Bring more spice to the kitchen with this class on using herbs and spices to add vitality and flavor to meals. The class will cover spice flavor profiles used in different ethnic cuisines and ways to use spice pastes, rubs and blends. Students will sample dishes that incorporate the mixtures and take home recipes and spice blends for the pantry.

Cooking with Flowers A
Instructor: Nanette Davidson
Saturday, May 4; 1 to 4 p.m.
$89 Member / $99 Non-member
Cooking with Flowers B
Instructor: Nanette Davidson
Sunday, May 5; 1 to 4 p.m.
$89 Member / $99 Non-member
Add edible flowers and herbs to dishes for flavor and flair. Learn what commonly grown blossoms to include in salads and baked goods and how to work with them. The class will cover preparing compound butters, crystalizing petals and other simple recipes to incorporate edible flowers into colorful and beautiful presentations.

Health and Wellness continued on page 22
**Hiking and Yoga A**
Instructor: Jenne Sluder  
Saturday, May 18; 10 a.m. to 12:30 p.m.  
$34 Member / $39 Non-member

**Hiking and Yoga B**
Instructor: Lillah Schwartz  
Saturday, June 8; 10 a.m. to 12:30 p.m.  
$34 Member / $39 Non-member

**Hiking and Yoga C**
Instructor: Jenne Sluder  
Saturday, July 20; 10 a.m. to 12:30 p.m.  
$34 Member / $39 Non-member

Experience the beauty of the surroundings and the invigorating calm brought on by practicing yoga on the Arboretum’s trails. Jenne’s classes will incorporate walking meditation and qi gong movements. Lillah’s class will incorporate breathing techniques to bring body, heart and mind into harmony with the earth. Participants should wear comfortable clothing and suitable hiking shoes for a one- or two-mile hike. Bring a large towel or a yoga mat, water and bug repellent.

**Deep Relaxation: Yoga Nidra A**
Instructor: Jenne Sluder  
Sunday, May 19; 2 to 4 p.m.  
$24 Member / $29 Non-member

**Deep Relaxation: Yoga Nidra B**
Instructor: Jenne Sluder  
Sunday, June 23; 2 to 4 p.m.  
$24 Member / $29 Non-member

**Deep Relaxation: Yoga Nidra C**
Instructor: Jenne Sluder  
Sunday, July 21; 2 to 4 p.m.  
$24 Member / $29 Non-member

Each session will begin with gentle tension-relieving stretches, followed by restorative poses with soothing live music. The class will culminate in a 45-minute yoga nidra guided meditation designed to induce full body relaxation. Sessions are suitable for all levels but require the ability to get on and off the floor unassisted. Mats and other props will be supplied.

**The Alexander Technique**
Instructor: Meredith McIntosh  
Saturday, June 1; 9:30 a.m. to 3:30 p.m.  
$78 Member / $88 Non-member

The Alexander Technique is a method for learning to “undo” physical patterns of tension to encourage more ease of movement in common activities like walking, standing and sitting. Students should wear comfortable clothing and bring an exercise mat and blanket. Some mats are available from the Arboretum.

**Introduction to Ayurveda**
Instructor: Vishnu Dass  
Wednesday, June 5; 9:15 a.m. to 12:15 p.m.  
$44 Member / $49 Non-member

In a time when there are so many approaches to healthcare, India’s ancient healing system of Ayurveda offers a simple and practical approach towards optimal health and vitality. This class will introduce the practical aspects of Ayurvedic nutrition, herbal medicine, home remedies, self care and more.

**Iced Tea Workshop**
Instructor: Miles Cramer  
Saturday, June 8; 1 to 3 p.m.  
$34 Member / $39 Non-member

Tea has traditionally been a hot beverage for hundreds of years. In the late 19th century, people began to realize that when iced and sweetened, tea makes a refreshing beverage to enjoy on a hot summer day. This hands-on class combines discussion and preparation of several different iced tea recipes using black tea, oolong, matcha green tea and herbal teas.

**A Solstice Hike in the Arboretum Forest**
Instructor: Arthur Joura  
Friday, June 21; 6 to 8:30 p.m.  
$22 Member / $27 Non-member

Reconnect with the natural rhythm of the season and become better acquainted with the far reaches of the Arboretum’s forest, paying special attention to the native trees and shrubs encountered along the way on this evening summer solstice hike. Participants should plan and dress for a vigorous walk of approximately four miles on the Arboretum’s hilly terrain, bringing water, insect protection or repellent, and other items for basic needs.

**Summer Qi Gong**  
AN EIGHT-WEEK CLASS  
Instructor: M. King Goslin  
Tuesdays, June 25, July 2, 9, 16, 23, 30, August 6, 13; 10:30 to 11:30 a.m.  
$98 Member / $108 Non-member

This summer series will allow focused practice of two gentle qi gong forms that support physical, emotional and spiritual well-being by quieting the mind, settling the emotions and awakening to the flow of energy in the body. This class is designed for students of all experience levels and can be practiced seated or standing. Students should wear comfortable clothing.
Register for Classes: Online, Call or Drop In

SIGN UP EARLY!
Classes fill quickly. Check online to see the latest classes and for more details about each class. We maintain a wait list for classes that are fully registered. You may add your name to the wait list online or call the office during business hours and request to be added to the wait list. If you must leave a message please include your name, a valid phone number and email address.

Class fees are due at registration; space in a class cannot be held without payment. You will receive a receipt and confirmation via the email address you entered (for online sale) or the email address associated with your Adult Education account. Please read the cancellation policy below.

THREE WAYS TO REGISTER

1 ONLINE at ncarboretum.org
Click on Education and Programs under the Arboretum logo, then Adult Education, then Classes. Select a class and view the description. Before proceeding to register you will need to create an account as a new user, or sign in as a returning student using the blue bar at the top right of the web page. Once you are signed in, your email address associated with your account will be displayed in the blue bar. Continue to register for the class or classes by completing the required billing and payment information. Your member discount will appear at checkout.

2 CALL
Call us during business hours, 9:00 a.m. – 5:00 p.m., Monday through Friday at 828-665-2492 to pay with your credit card. Cards accepted include: Visa, MasterCard, Discover, and American Express. (Please leave us a message and replies to phone messages will be returned within one business day.)

3 DROP IN
You may drop by the Arboretum administrative offices in the Education Center during business hours, 9:00 a.m. – 5:00 p.m., Monday through Friday, and register in person with cash, check or credit card.

PROGRAM POLICIES
Each individual Arboretum Society member may register for courses at the discounted member program fee. Guests and family members do not qualify for the discount and should be registered at the non-member fee. Household and higher level members may register household members at the member fee. The program registration fee includes the Arboretum parking fee. Arboretum members always park free.

Please note that many courses are held outdoors and may require walking a moderate distance in a variety of weather situations. If you have any questions about physical requirements, please call the Adult Education offices at 828-665-2492.

Adult Education programs are for adults ages 18 and over. The North Carolina Arboretum strives to offer a quality educational experience for each registered student, and class sizes reflect this policy. Registered students may not bring an unregistered guests of any age to class. Classes are held rain or shine. However, if severe weather threatens, please check the Arboretum website or call 828-665-2492 for closings and delayed openings.

CANCELLATION POLICY
If you must cancel your registration for a class, you will receive an 85% refund if notice is received by email at least eight calendar days before the class begins. No refunds are granted less than eight calendar days before the class starts or after the class has begun. In the event that the Arboretum must cancel a class, you will be notified by phone or email, and you will receive a full refund.

Your payment for your class reserves your seat, helps us to confirm the class and officially engage the instructor. If you cannot attend and it is too late to cancel and receive an 85% refund, you may choose to send an alternate person in your place. If you are late for class, your seat will still be available for you. We do not transfer a registered student’s seat to last minute/walk-in students. Partial refunds or transfers are not available for unattended sessions of a single class or a class series.

By registering online, over the phone, by mail or in person, you are agreeing to the Arboretum’s eight-day cancellation policy outlined above. You are also agreeing to the liability waiver viewable online in the Adult Education section of the Arboretum’s website.
springsummer

SPRING | SUMMER
CALENDAR OF EVENTS

Crafty Hour: Wreath Workshop — March 31
ArborEvenings — Thursdays, April – October
Asheville Orchid Festival
  Member Preview – April 5
  Public Viewing – April 6 – 7
Bat + Moth Party — April 13
Mountain Science Expo — April 27
Crafty Hour: Terrarium Building — April 28
What Goes HOP in the Night — May 10
World Bonsai Day — May 11
Member Plant Sale
  — May 22 – 23 and June 12 – 13
Rose Show — May 25 – 26
Crafty Hour: Rose Petal Mandala — May 26
Crafty Hour: Smudge Stick Workshop
  — June 30

PROPERTY DAYTIME HOURS

WINTER
January 1 – March 31
8 a.m. – 7 p.m.
(incoming gates close at 6 p.m.)

SPRING/SUMMER
April 1 – October 31
8 a.m. – 9 p.m.
(incoming gates close at 8 p.m.)

FACILITY HOURS

Buildings and Bonsai Exhibition Garden
Daily, 9 a.m. – 5 p.m.

Connections Gallery Gift Shop
Daily, 11 a.m. – 4 p.m. (November – March)
Daily, 9 a.m. – 4 p.m. (April – October)

Bent Creek Bistro
Tuesday – Sunday, 11 a.m. – 4 p.m.,
starting Friday, March 15
Note: The Bistro will celebrate its
Grand Re-opening Week, March 15 – 22.
Stop by and enjoy a variety of spring
specials and treats.

Arboretum to Expand Facilities
Thanks to $905,000 Grant from Buncombe County Tourism Development Authority

Efforts are now underway to expand the Arboretum’s parking and lighting infrastructure thanks to a $905,000 grant recently awarded by the Buncombe County Tourism Development Authority (TDA). With these funds, the Arboretum will be able to add decorative lighting in the gardens and key facilities to support more evening experiences, and will also expand parking to increase capacity for both daytime and evening attendance. The Arboretum Society was one of only six organizations to be awarded a 2018 grant from the Tourism Product Development Fund, which supports projects that increase economic growth and impact in the Buncombe County region. Be sure to enjoy some of the Arboretum’s new outdoor evening programs starting this April, including our new “ArborEvenings” series, held every Thursday, April – October, from 6 to 9 p.m. Many thanks to the Buncombe County TDA for this opportunity!

100 Frederick Law Olmsted Way
Asheville, NC 28806-9315

The N.C. Arboretum property is under permit by the Pisgah National Forest and prohibits discrimination. Please visit ncarboretum.org for details on its anti-discrimination policy.
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