SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB

SPRING 2014

Shortia galacifolia

Oconee Bells
WESTERN CAROLINA BOTANICAL CLUB

President  Helen Smith  Secretary  Joy Charlebois
Vice-President  Jeanne Smith  Treasurer  Alan Graham

MEMBER NEWS

Field Trip Cancellations: On occasion field trips must be cancelled or changed either for weather conditions or other reasons such as road closings. Such changes are sent out by email to all members by 7 AM the day of the field trip. If you do not have email access, we will try to reach local members by telephone by 7 AM. If you are in doubt, contact a leader or co-leader whose telephone number is listed on the schedule. When a field trip is cancelled, no member will be at the contact point. Programs are cancelled when Henderson County Schools are closed (see http://www.hendersoncountypublicschoolsnc.org) but NOT necessarily canceled because of delayed opening.

New Members:  Marion Crounse, Carrol Rush, Tryon
Kathleen Sanders, Flat Rock
Gillian Watters, Hendersonville
Jerry and Beth Redmond, Clemson, SC
Owen Carson, Brevard

FOLLOWING IN THE BARTRAM’S FOOTSTEPS

The Cherokee Garden Library, part of the Kenan Research Center at the Atlanta History Center, which owns a first edition of William Bartram’s Travels (1791), is planning a series of lectures and exhibitions from March to June, 2014, on the Bartrams and their legacy. For more information, contact scatron@atlantahistorycenter.com.
As you all remember, the spring and early summer of 2013 was loaded with rainy days. Three of the first nine walks had to be cancelled. Also, the rain seemed to play havoc with the normal blooming periods. **Twin Bridges**, an annual favorite, was noticeably weak in quantity and quality of blooming plants. Old favorites, **Pearson Falls** and **Station Cove**, seemed to be unaffected by the unusual weather patterns.

The planned overnight to the Smokies had to be cancelled due to a lack of signees. However, a few diehards wanted to see **Big Creek**, so we went there on a day trip. Reportedly, the group was not disappointed, as Yellow Toadshade (**Trillium luteum**) was particularly abundant.

We had a guest leader, Tim Lee, at **Jones Gap State Park**. He knew where to find the "Jones Gap" Trillium, which was a special treat for all of us. The Latin name for this species has not been determined.

Sandy Schenck, the guest leader at **Green River Preserve**, is the owner of the property and regaled us with local stories about the area. French Broad Heartleaf (**Hexastylis rhombiformis**) was a noteworthy plant found during the walk.

We have visited **Lewis Creek** in the past, but, since then, a boardwalk-assisted path was constructed in the bog area. We visited in April and again in July to get a seasonal perspective. Ragged Fringed Orchid (**Platanthera lacera**) was a noteworthy plant in July.

**Wolf Mountain Overlook** was a much-visited location. We took every chance we had to incorporate a stop there as part of another walk. The diversity of blooming plants throughout the season is a continual treat.

**Sky Valley Road** was a personal favorite for me, as I think it provides a summer equivalent to the springtime locations regarding the number of different blooming plants that we find there. Rock Portulaca (**Talinum teretifolium**) actually takes two trips, as it only blooms in the afternoon.

An unscheduled side trip provided an interesting opportunity to see the Three Birds Orchid (**Triphora trianthophora**) in bloom. The bloom only lasts one day, so it is hit or miss to find one. We followed up a tip about a spot near the Pisgah Ranger Station where they had been found. It provided us with a "let's stop and see if they are blooming" moment on several walk days.

Ken Borgfeldt
MAYAPPLE

The leaves of Mayapple grow from underground stems on the forest floor. The stems grow horizontally, branching through the leaf litter, gradually expanding until dozens of leaves grow in a path that can be several meters across.

Native Americans knew that the plant had powerful properties. At very low doses, extracts from the plant were used as laxative and to kill intestinal worms; higher doses, which would be fatal if ingested by people, were put onto newly sown corn to protect the seed from crows and insects.

Modern studies of Mayapple have found that the plant’s chemicals can kill viruses and cancer cells. Mayapple extract is now used in creams that heal warts caused by viruses. After the extract has been chemically modified, it becomes a chemotherapy against cancer.

Bumblebees pollinate the flowers of Mayapple, flying under the leaves to reach the nodding white blooms. Later in the summer, the flowers mature into small yellow fruits, each about the size of a small lemon. The fruits are favored by box turtles; only those Mayapple seeds that have traveled through the gut of a turtle will germinate.

Mayapple, ginseng, and yam are all small plants that overwinter as nutritious underground stems or roots, rich in defensive medicinal chemicals that play havoc with the guts, nerves, and hormones of their enemies—marauding mammals and insects.
(From *The Forest Unseen: A Year’s Watch in Nature* by David George Haskell.)

A rite of spring for many folks is a stroll through the Azalea Garden at Biltmore. Chauncey Beadle, a Canadian horticulturist hired by Frederick Law Olmsted in 1890, was responsible for it. Beadle served as estate superintendent from 1909 until his death in 1950. He had a special fondness for native deciduous azaleas and collected them throughout the Southeast. In 1940, he gave his entire collection of azaleas to Biltmore.
BOOK REVIEW


Henry David Thoreau died peacefully in the front parlor of his mother’s home on Main Street in Concord, Massachusetts, on the morning of May 6, 1862. Tuberculosis, a common killer of the time, took him at just forty-four years of age. Among the mass of papers he left behind was the manuscript of *Wild Fruits*, published in 2000 for the first time. The final harvest of a great writer’s last years, *Wild Fruits* presents Thoreau’s sacramental vision of nature—a vision compelling in part because it grew out of an approach to the natural world at once scientific and mystical.

Although Thoreau began writing *Wild Fruits* in the autumn of 1859, the manuscript was part of a much larger project begun early in that decade. During this period, he began cultivating an interest in science, particularly botany. He built a “scaffold” inside the crown of his hat to hold plant specimens and started carrying a botanical guide with him on his afternoon walks. By mid-November 1850 he was regularly dating his journal entries and had stopped culling pages from his journal notebooks—both changes that ensured a complete and accurate record of his field observations.

In December 1850, he was elected a corresponding member to the Boston Society of Natural History, an honor that included lending privileges at that organization’s impressive library.

The spring of 1851 marks the middle of this important transitional period for Thoreau. He began reading books on natural history and purchased a blank book, which he called his “Common Place Book,” for recording passages from his natural history readings. Within the next couple of months he compiled the first of what would become many hundreds of phonological lists and charts on every conceivable seasonal phenomenon, such as the migration cycles of birds or the leafing, flowering, fruiting, and seeding of plants.

With the realization that his remaining life’s work was to probe the “rich and fertile mystery” of nature and describe the “divine features” he discovered, Thoreau’s great period of transition came to an end.

*From the Introduction by Bradley P. Dean, a staff member of the Thoreau Institute in Lincoln, Massachusetts.*
TRAILING ARBUTUS, by Emily Dickinson, 1875

Pink - small - and punctual -
Aromatic - low -
Covert - in April, Candid - in May -
Dear to the Moss -
Known to the Knoll -
Next to the Robin
In every human Soul -
Bold little Beauty
Bedecked with thee
Nature forswears Antiquity.

Trailing Arbutus, of the Ericaceae family, has a delicate allure. The Pilgrims named it the "Mayflower" when they discovered it in the woods. A creeping, evergreen sub-shrub, Epigaea repens is found on north- or east-facing slopes in our North Carolina upland woods where fallen oak leaves are blown away and will not smother the undulating oval leaves of this valuable native wildflower. Soil requirements include moist, well-drained, acid qualities. Oddly, Trailing Arbutus also thrives in the Eastern turkey oak woodlands where scorching white sands offer a wildly divergent habitat! E. repens succeeds easily in both arenas, but no other species associated within the forest can boast of this unique ability.

Shrubby in nature, Trailing Arbutus forms terminal and lateral, very fragrant white and/or pink flower clusters from previous year's buds. These are often seen as early as February here in western Carolina (or even before that, weather permitting). After flowering, the plant sends out 1-3 whorls of new growth from the tips of the previous season's wood; then unfolds its stiff leathery leaves. These are held at a 45-degree angle to best absorb the available sunlight streaming through the trees. The plants are rather slow growing.

Propagation of Trailing Arbutus by stem cutting is easier than by seed (which needs light to germinate). Take 1-2" lengths of stem with their leaves, 8-10 weeks after flowering. Dip them in hormone powder, and plant in a 1:1 mixture of peat/perlite. Keep in the shade; and put in a cold frame through the winter. Well-rooted cuttings are ready to put out the following spring, and sitting the plants in their natural habitat will ensure success in the garden.

Native plants are wondrous things that fill our lives with color, fragrance, and beauty. There is great value in preserving wilderness, and in "putting something back." Foster deep respect and love for all things green.

Karen Koelling
Forgive me the editor’s privilege of touting my alma mater, but I couldn’t resist writing about a July 26, 2013 article in *The New York Times* by Lisa W. Foderaro, “Vassar Revives Garden Nurtured by Early Promoter of Native Plants.”

I remember that, even in my day as a student, the Vassar College campus had been designated a New York State botanical garden. I especially enjoyed the “Shakespeare Garden,” which has specimens of every plant mentioned in William Shakespeare’s works.

Several students, working with biology professor, Meg Ronshein, have resurrected a native plant garden that was cultivated by botany professors and students in the 1920s, long before native species became a rage, and then forgotten for decades. The garden was the life’s passion of Edith A. Roberts, a professor of plant science, who set out to document every species of plant found in Dutchess County. The four-acre site was called the Dutchess County Outdoor Ecological Laboratory. According to Prof. Ronshein, “She was trying to understand what plants grow together, where they grow and how they reproduce. That’s what an ecologist did. This was cutting-edge science and she brought it to Vassar.”

After Dr. Roberts retired in 1948, the garden, which runs along a creek called the Fonteyn Kill, was maintained for a few years. [I remember taking walks there in the ‘50s.] But by the 1960’s it had been abandoned.

Dr. Roberts wrote a series of articles in *House Beautiful* magazine and then in a 1929 book, *American Plants for American Gardens*, in collaboration with Elsa Rehmann, a landscape architect, which has long-since gone out of print.

The article goes on to discuss other New York gardens with native plants. “Both the New York Botanical Garden, in the Bronx, and Brooklyn Botanic Garden turned a spotlight on native plants. The Bronx garden includes 454 species found east of the Mississippi River. In Brooklyn, a newly expanded Native Flora Garden, designed by Darrel Morrison a prominent landscape architect and proponent of native plants, made its debut in June.” [I chanced to meet one of the Brooklyn horticulturists this fall on a busman’s holiday at the NC Arboretum.]

If you go on a vacation to the beautiful Hudson River Valley, do include the Vassar campus along with FDR’s Hyde Park, the Vanderbilt Mansion, West Point, and many other fabulous venues.

Paula Robbins
The purpose of the Club is to study the plants of the southern Appalachian Mountains and the Southeast through field trips and indoor meetings. Membership is open to all. Individual/family memberships are $15. New members joining from the period July 1-December 31 pay $8. All memberships are renewable on January first of each year. Send dues to Alan Graham, 544 Tip Top Road, Brevard, NC 28712.