SHORTIA

NEWSLETTER OF THE

WESTERN CAROLINA BOTANICAL CLUB

FALL 2009

Shortia galacifolia

Oconee Bells
A recent study found that elderly folks derive substantial benefits to their mental well-being by participating in the game of bridge. Evidently it's a very demanding game, requiring you to keep track of who's playing what cards and thereby how you should play your cards to complement what cards you think your partner holds in order to defeat your competitors.

Although perhaps not as demanding as bridge, the complexity of the botanical world presents a challenge to most of us. Each Spring seems to initiate a relearning process of the plants we knew the previous year. How many times have we asked one of our master botanists the genus of a plant as opposed to the common name. And to make things worse, the plant taxonomists keep coming up with new Latin names and shuffling around the taxonomy. In the face of resulting frustrations with forgetfulness, we can console ourselves that all these new names we’re learning and associating with visual images of plants and all of their intricate characteristics is likely improving our memories and fighting off senility.

Many of us are also gardeners, and as such, are faced with the tedious task of weeding. But here again arises the need for perception and identification, and in a much more rapid manner as we decide what lives and what dies. Weeding could be viewed as applied botany. And it’s sometimes much more demanding, in terms of identification without the benefit of flowers, especially when you’re doing it quickly, to be done with the task. It’s sort-of like the computer "Pac-man" game, but with multiple kinds of "good guys" and "bad guys". Larason finds that it’s a very similar process, but at a much more rapid pace, in trying to save desirable plants while weed whacking. In addition to the mental exercise that weeding gives us, it’s good practice for our botanical outings, where many plants are not in bloom. Perhaps we should just slow down and enjoy the weeding as another form of botanizing.

So while bridge might do more for our mental agility, our botanical outings give us the additional benefit of some exercise in our walks, and allow us to experience the beauty and wonder of the plants we encounter and many other aspects of being out in the natural world.

Cover: The flower on the cover is Shortia galacifolia, Oconee Bells. Our newsletter is named for this southern endemic which is now rare in the wild.
Member News

New Member

Maryke Nol. Maryke Nol is a native of Holland. Now she lives in St. Petersburg, Fla. in the winter and Sherwood Forest in the summer. She became interested in identifying the flowers as she likes to hike and she also likes to read.

Moved

Long time members Bud and Laverne Pearson have moved to Florida. Laverne often volunteered as a co-leader or as a recorder on our weekly field trips. Bud served for two years as editor of Shortia.

Book Sale

The book sale which was held at the Annual Meeting netted $192. Thanks to all who donated books and to those who set up and manned the tables.

Field Trip Cancellations. On occasion field trips need to be cancelled or changed either for weather conditions or other reasons such as road closings. Such changes are sent out by e-mail to all members at the latest by 7 a.m. the day of the field trip. If you do not have e-mail access, we will try to reach local members by telephone by 7 a.m. If 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.

Any change of address, e-mail or telephone number, please inform our Treasurer, Alan Graham
544 Tip Top Road, Brevard, N.C. 28712. 828-884-3947 <adraham@citcom.net
The seemingly constant rain this season caused a stir regarding cancellations. In keeping with the uncertainties of our mountain forecasts we walked on rainy days and sat home on sunny days – go figger'.

The Pilot Mountain walk was replaced with Pine Tree Loop, a new walk in the Powhatan area. It rained but a few hardy souls walked anyway and had a good time (so they said). I went on the scout and the most interesting sight was the flip-flops worn by the walk leader.

The walk at Coleman Boundary was perfect with just a little overcast to hold down the heat. A wide variety of bloomers including abundant displays of Canada Mayflower (Maianthemum canadense) and Wild Stonecrop (Sedum ternatum) were found along the way.

The walk at Davidson River was modified slightly as we went down the trail past the English Chapel and then over to the Nature Trail. It seemed to be a Hexastylis walk for a while as we saw lots of Large-flowered Heartleaf (Hexastylis shuttleworthii) and then Little Brown Jugs (Hexastylis arifolia). Bloomers along the way included Puttyroot (Aplectrum hyemale) and Gray Beardtongue (Penstemon canescens).

We usually are treated to the alien-looking bloom of the Whorled Pogonia (Isotria verticillata) on the Tanbark Ridge to Bull Gap, but we did not see any this year. However, the Fire Pink (Silene virginica) and Flame Azalea (Rhododendron calendulaceum) provided a brilliant display of color.

Lewis Creek sort of lived up to its name as heavy rains during the week turned the greenway into a mini flooded plain. Botanically we were somewhat challenged as lots of grasses and sedges went the "sp" route. We did find one of our species that had not been previously recorded - Pineapple Weed (Matricaria discoidea).

The walk at Heintooga Spur was warm and sunny. The Small Purple Fringed Orchid (Platanthera psycodes) was blooming at several spots on the roadside. Two other species of note included Devil's Paintbrush (Hieracium aurantiacum) and Tassel Rue (Trautvetteria carolinensis).

We had a clear day at Whiteside Mountain so the views from the top were excellent. Leatherflower (Clematis alibcoma) in bloom at the top of the trail was an interesting find. Several St. John's-wort's including Bushy (Hypericum densiflorum), Appalachian (Hypericum buckleyi), and Spotted (Hypericum punctatum) were just beginning to bloom.

It was a pleasant day at Bee Tree Gap and the wildflowers were blooming profusely as usual with the Black-eyed Susan (Rudbeckia hirta) especially abundant. A couple of noteworthy plants included Orange Coneflower (Rudbeckia fulgida) and Wine-leaved Cinquefoil (Sibbaldiopsis tridentata).

The Shut-in Trail to Mills River Overlook was one of those "maybe we can beat the rain" days and we didn't! The Starry Campion (Silene stellata) was in good bloom along the trail. The rare Fringed Campion (Silene ovata) was in bud and lots of plants were found. On a sour note, the invasive Virgin's Bower (Clematis virginiana) seems to be taking over a portion of the trail and forcing many natives out.
Did You Know?

The Winners

On July 11, The Carolina Mountain Land Conservancy (CMLC) held an open house celebrating the new 3200 square foot, passive solar, energy efficient and green-outfitted building in Ironwood Square, Hendersonville. In addition to a wine and cheese reception, winners of CMLC’s first juried art show were honored.

The first prize was won by Pat Arnett. It was entitled “Botanists at Lewis Creek”, an oil painting based on a photograph taken by Ken Borgfeldt on a recent field trip. The Botany Club members in the painting are: Juanita Lambert, Ruth Ann Gibson, Cynthia McCurdy, Kim Spencer, Karen Koelling and Fran Huddleson. Pat is a former Botany Club member who during her membership served as Assistant Editor of Shortia.

The second prize was won by Botany Club board member, Lucy Prim. Her water color was entitled “World’s Edge”. After the morning at Lewis Creek, Ken Borgfeldt took the Botany Club group to World’s Edge where they could enjoy the beautiful view which is depicted in Lucy’s winning painting. Congratulations to Pat and Lucy.

Chimney Rock State Park

The NC State Parks, the Department of Transportation and the United States Department of Agriculture (USDA) are working together to combat invasive species in Chimney Rock State Park. The nemesis is princess tree also known as Paulownia tree. Princess trees are known by their dangling purple flowers and broad leaves. They may be pretty when in bloom but they grow at an alarming rate and often on steep rocky slopes where they encroach on rare native species. This is the case at Chimney Rock.

"By themselves, the princess trees are bad enough, but they are also giving kudzu ample opportunity to climb into their canopies and develop the characteristic kudzu formations. Eventually this will kill off the native trees and the native ground cover" says Marshall Ellis, mountain region biologist for the Division of Parks and Recreation.

Two native species of concern at Chimney Rock Park are Granite Dome goldenrod (Solidago simulans) and Biltmore Sedge (Carex Biltmoreana). They have limited ranges in North Carolina and are listed as Federal Species of Concern.

The work, already begun, is expected to be a multi-year project, especially the kudzu removal, but once the trees are down, the kudzu will be easier to treat.

Marshall says. “We anticipate that if we can get the invasive plants reduced, the natives that are already adjacent will reestablish and take the site back”.

-From “VIEWS” Chimney Rock State Park, Summer 2009
Let's Look at Lobelias

Late summer and early autumn is the time to enjoy flowering lobelias. Their spikes of vibrant red and blue flowers color damp meadows and stream banks.

Lobelias are members of the Campanulaceae family. Since they are the only genera of this family with zygomorphic or irregular flowers some taxonomists think they should be recognized as a separate family, the Lobeliaceae. The flowers are bilaterally symmetrical. If you cut the flower in half longitudinally each part would be the same. If you cut it horizontally each half would be different. Each flower is two lipped. The upper lip has two erect lobes, the lower lip has three spreading lobes.

The lobelias were named to honor Metthia De'l Obel, an early Flemish herbalist. When he became the personal physician of King James I he anglicized his surname to Lobel.

Cardinal Flower (Lobelia cardinalis) and Great Blue Lobelia (Lobelia siphilitica) are the most commonly seen species. Both are tall plants with large terminal blossom spikes. They like to grow in ditches and wet meadows. Cardinal Flower was named for the resemblance of the brilliant red flowers to the color of the robes worn by Roman Catholic Cardinals. They attract and are pollinated by hummingbirds and long tongued butterflies—Spicebush and Eastern Tiger Swallowtails. Great Blue Lobelia has dark blue flowers with a white throat. William Bartram wrote that the Cherokee used the root of this plant to treat syphilis. It was not effective.

Indian tobacco (Lobelia inflata) is a weedy annual often found in fields and waste places. It has small light blue flowers growing in the leaf axils. When fertilized, the ovary enlarges to resemble a small inflated balloon. Early settlers observed the Cherokee smoking the dried leaves of this plant.

Nuttall's Lobelia (Lobelia nuttallii) is a delicate plant with narrow linear leaves. The pale blue 3/8 inch flower has two greenish spots on the lower lip. This infrequently seen plant has been recorded on WCBC field trips to Sky Valley Road, DuPont-Cedar Rock Mountain, Craggy Pinnacle and the Botanical Gardens UNCA.

Downy Lobelia (L. puberula), Pale Spiked Lobelia (L. spicata), Southern Lobelia (Lobelia amoena) and Glade Lobelia (Lobelia glandulosa) have also been recorded on our field trips. They all have blue flowers. Downy lobelia can be recognized by its hairy stem and one sided inflorescence.

-Bonnie Arbuckle
The Green Salamander

Green salamanders are one of the most unique salamander species in the eastern United States. They represent the only member of the “climbing family” of salamanders (genus *Aneides*) east of the Rocky Mountains. This salamander is distributed from southwestern Pennsylvania south to central Alabama along the Appalachian Plateau with an additional disjunct population found in the southern Blue Ridge Mountains of North Carolina, Georgia and South Carolina. In North Carolina, the green salamander has two disjunct separate populations, one in the Blue Ridge escarpment of Macon, Jackson, Transylvania and Henderson counties, and another in the Hickorynut Gorge area of Rutherford and Henderson counties.

Across their range, these salamanders occupy one of the narrowest niches of any salamander species, residing almost solely in small, moist (although not wet), clean (containing neither sediment nor moss) horizontal crevices in rock outcrops. They are also infrequently found residing and/or foraging in trees.

Adult green salamanders typically measure from 8-14 cm long and are specifically adapted to their rocky homes. They are easily identified by the greenish lichen colored patches on their flattened black body. Within North Carolina they usually occur in moist mixed deciduous forests between 290m and 1340m elevation.

From the early 1970’s, populations of the green salamander have declined by 98% and prompted the U.S. Fish and Wildlife Service in 1987 to review the status for Endangered Species protection. However that designation was denied and the disjunct population is now a “Species of Concern”. In N.C. they are considered endangered, in S.C. a “Species of Concern” and in Georgia “rare”. None of these offer any legal protection.

Wild South is working with the N.C. Wildlife Resources Commission monitoring populations and surveying new sites for potential populations.

Excerpted from “Wild South Quarterly” Summer 2009
Wild South’s home office is Asheville, N.C.

Corrected Illustrations and captions from the Hornbeam article in the Summer Shortia

*Carpinus Caroliniana*, American hornbeam, ironwood, musclewood.

Leaf, twig, enlarged bud leaf at end of twig, enlarged flower bud and leaf scar.

*Ostrya virginiana*, Hophornbeam, American hophornbeam, ironwood.

Leaf, twig, enlarged bud at end of twig, showing leaf scar and twig scar, unlobed twig with catkins.
Toward Pisgah

Of world we make
the mind and it
becomes
all we know

and the actual real
lies always still

beyond the horizons
of our words
our dream of world

lost if not engaged,
but easily unseen, lost
in another way,
in the encounter.

Elevated Pisgah
by earth's energy
the tellurian collisions

now a mile high - not
great as mountains go -

no Sagarmatha -
but eons older, and
in its own
range, the ridge
in which it was
cast up
has its own presence.
Its peak defines
its particularity, and
its mass merges with
more north
south and west
to define its own
high country:

Nantahala,
Cullasaja,
Tuckasege -
no matter which way
descended from its
slopes
the rivers gather in one
direction: West.

-Jeff Davis

Sagarmatha is Sanskrit for
"Sagar = sky and matha =
forehead or head " and is the
modern Nepali name for Mount
Everest.
Green River

There must be water to open the earth to the digging root, to ease its entry deeper.

Here, it wore the land hollow. Low willows watch water slip over stones through thick rhododendron, tree-rose, kalmia, laurel wood.

This was your river, Lady of the Rivers, when I came to you lost in my own thicket of mind’s perplexity, and you bathed me in the torpor of a vivid sleep, anointed me, joined me to the body of the land your river passed through, took me beyond myself, and the argument I let die as it mingled with the cool air, lost among the leaves.

You
Lost Agisegwa.

And still the water that she was remains to find its way always down through the scattered stones of her forgotten sanctuary, creek to river, to ocean, there raised up to spirit once more, into the moving aether, to fall on these hills as rain, opening the soil, sustaining by her stream the oaks, the rose tree, lichens, moss, and all below.

-Jeff Davis

Agisegwa is the “Great Lady” (or “great female”) of the Cherokee. She wasn’t a river goddess, so far as we know, but serves as one here.

Jeff Davis grew up in Charlotte, North Carolina, received degrees from UNC Chapel Hill and the State University of New York. He apprenticed from 1972 to 1975 to a native carver of ceremonial masks and totem poles in Alert Bay, British Columbia. He returned to N.C., settled in Asheville, and taught Anthropology and History classes at UNC Asheville for a decade. In July he read some of his poems in Hendersonville during the StoryTelling weekend.

These poems are reprinted with his permission from his book “Natures/Selected Poems 1972/2005”
SHORTIA
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Editorial Assistants: Jean Lenhart, Kim Spencer
Member News: Ruth Anne Gibson

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, N.C. 29812