SHORTIA

NEWSLETTER OF THE

WESTERN CAROLINA BOTANICAL CLUB

Summer 2009

Shortia galacifolia

Oconee Bells
From the President ................................................................. Juanita Lambert

The Native Woodland Garden at the Bullington Center was conceived as a stylized natural garden showcasing how native flora can be used in home landscaping. Members of the Western Carolina Botanical Club were very active in the initial wildflower plantings in the Garden in 2004, bringing plants from their own home gardens. Nearly thirty species were donated, many in quantity. They also transplanted unique plants from elsewhere on the Bullington property. Near the end of this early stage, a gateway was constructed at the beginning of the trail, formalizing the Garden’s entrance.

In 2005, less-desirable woody vegetation of the Garden was thinned out to provide more light and to give the woodland a more spacious and mature feeling. During this time, Botanical Club representation at Bullington consisted primarily of Larason and Juanita Lambert. The Bullington Botanical Bunch formed when Bonnie Arbuckle joined the effort in early 2006.

Bonnie became the defacto leader of the Bunch, with Juanita working closely with her and Larason assisting with the more laborious tasks. After they documented the existing (surviving?) herbaceous vegetation in the Garden, Juanita created plant labels listing the plants’ Latin and common names. They also transplanted additional perennials from around Bullington and wherever else they could find them, including their own gardens. Larason rearranged a conglomeration of large rocks into a "rock formation", and planted it with ferns.

Planting in the Native Woodland Garden continued in 2007. As plant material requiring more sun became available, the Bunch’s activities expanded to the opening near the Amphitheater, which they enlarged prior to beginning planting. Frances Jones joined the Bunch in 2007 and has been a regular ever since. In late 2007 and early 2008 the Bunch made several trips to a nearby property slated for development, rescuing a number of noteworthy species of bushes and perennials. In order to facilitate watering new plants being transplanted to the Garden, a series of fixed hoses was installed, with outlets at several levels, and during the dry summer of 2008, much time was spent watering the plantings.

During these years, routine weeding and debris clean-up has been a regular part of the Bunch’s activities, but it’s all done in a spirit of constructive cooperation. The Bullington Botanical Bunch seems to have become a stable entity at Bullington, and its existence may be as much social as it is botanical. If you are at all inclined toward this kind of volunteer activity, we would love for you to join us. We typically work in the Garden for about three hours each Tuesday morning, and then enjoy a picnic lunch together, outside if the weather permits.
Member News

New Members

Ann Ewing was born in Greenville, S.C. and moved to California when she was young. In California she served as a nature guide on a trail designed for the physically disabled. She has been living in Tryon for the last four years, and has designed a training program for the Tryon Garden Club for those members interested in serving as guides at Pearson Falls.

Howard and Linda Jackson live in Asheville. Linda is a retired psychiatrist. Howard and Linda are volunteers with Dr. McCoy at the Bent Creek Institute Germplasm Facility at the N.C. Arboretum. They work two days a week. Linda mounts the dried plant culture and Howard assists with the computers and photography. Howard also serves as a guide in the Segway program.

Mary Clare Jenks has lived many different places but always pursued native flowers wherever she is. She is a passionate gardener and birder. She has been a member of Tryon Garden Club for 15 years. She will be spending three summer months in Canada.

Carolyn Trapp has lived in Wisconsin, California, Colorado, Florida, Montreal, Charlotte and now Arden. In all these places she has been interested in learning the native flora and sharing her knowledge with her children. California presented the most challenge as it was so different from this area. She is glad to be back in the mountains.

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

Alan Graham, 544
Tip Top Road, Brevard, N.C. 28712. 828-884-3947 <adgraham@citcom.net>
Since I missed the spring edition of Shortia, I have a lot of catching up to do.

We started the field trip season with a cold and wet **Hardy Souls Hike** at the Pisgah Ranger Station and it seems to have set the tone for this year’s outings - clouds and rain. Despite the weather we had a nice stroll with Gill-over-the-Ground (*Glechoma hederacea*) as the main attraction.

The visit to **Holmes State Forest** presented an all time first in my experience when it was so cold several people left early and no one stayed for lunch! The American Trout Lily (*Erythronium americanum*) tried to put on a show with many blossoms but the cold did not allow them to open fully.

**Station Cove** and **Baxter Creek** were victims of the weather as both were rained out.

It was warm and sunny for the trip to **Pearson Falls**. The American Trout Lily (*Erythronium americanum*) took advantage of the sun for a brilliant display. Also, the Sharp-lobed Hepatica (*Hepatica nobilis* s. *acuta*) was in abundance. As is her custom, Millie set out a wide variety of desserts for lunch at her home.

We had another sunny day and a great turnout for the **Twin Bridges Area** walk. The walk on Pacolet Conservancy property produced a lot of wonderful plants including May Apple (*Podophyllum peltatum*) in bloom and Green Violet (*Hybanthus concolor*) in bud. Lunch on the railroad tracks is always an interesting diversion.

The outing at **Glassy Mountain Preserve** was actually quite warm. The rock outcrop plants population has been decimated for some reason. The Painted Buckeye (*Aesculus sylvatica*) was blooming profusely.

The **Jones Property** produced its usual wide variety of plants - the list is six pages and we still found six more plants to add to it! Especially noteworthy was the French Broad Heartleaf (*Hexastylis rhombiformis*) which was in bloom. The Doll’s Eyes (*Actaea pachypoda*), which we are used to seeing in seed, were in bloom.

We had a perfect day for the trip to **Pacolet Falls**. The major discussion involved Jeweled Wakerobin (*Trillium simile*) and White Wakerobin (*Trillium erectum*). The former was declared the winner. Lots of other plants in bloom and lunch at the falls is always a treat.

The local weather did not look promising for **Corneille Bryan Nature Center** but the day was jam-packed with native plants (77 different species in bloom) with varied habitats.

We had an outing at the **Givens Estates** for the first time in long while. Wild comfrey (*Cynoglossum virginianum*) was blooming. We are excited when we see one plant at Coleman Boundary! Lots of Southern Nodding Trillium (*Trillium rugelii*) were found.

We closed out this reporting period with a new location - a mountain bog at **Green River Preserve**. It rivaled the Holmes State Forest experience except this was rain, lots of it. Everywhere was a bog even the trail. Blooming Yellow Lady Slippers (*Cypripedium calceolus*) and Vasey’s Trilliums (*Trillium vaseyi*) kept it from being a complete washout.
Western Carolina Botanical Membership 2009

Arden
Jackson, Howard & Linda

Asheville, N.C.
Beyer, Patsy
Conway, Rachel M.
Durpo, Wilma
Hankins, Diane
Jackson, Howard & Linda
Hansens, Aline
Kolton, Marilyn
Lackey, Charlotte
Middleton, Dave & Milly
Reed, John
Robbins, Paula
Schuman, Nancy
Siddall, John & Muriel
Tait, Andy

Black Mountain, N.C.
Feil, Elisabeth

Bon Air, VA.
Verduin, Bill & Evelyn

Brevard, N.C.
Farrar, W. Edmund & Carver
Graham, Alan
Hudson, Jack & Dorothy
Iha, Nancy
Jones, Betty
Leibling, Jenny & Dave
Schifeling, Daniel & Annalee
Smith, Jeanne
Walls, Harriet
Woods, Jean

Campobello, S.C.
Ashburn, Carolyn/Hearon, Chuck

Candler, N.C.
Carlson, Betty

Canton, Ga.
Avery, Larry

Canton, N.C.
Fishback, H.D. and Jan

Cedar Mountain, N.C.
Steinberg, Aleen
Wilcox, Gail

Columbus, N.C.
Smoke, Henry & Therese

Etowah
Barnes, Christine
Charlebois, Joy

Flat Rock, N.C.
Arbuckle, Bonnie
Gibson, Ruth Anne & John
Jones, Frances
McCurdy, Mike & Cynthia

Greenville, S.C.
Wasson, April

Hendersonville, N.C.
Anderson, Ken
Armstrong, Rebecca
Bentley, Glenda
Bockoven, Paul & Beth
Borgfeldt, Ken & Chris
Collins, Ed
Dice, Bill & Ann
Duncan, Tina
Fouts, Carol & Gregory
Gordon, Stephanie
Hane, Jim
Herman, Don & Dana
Kirkland, Jean
Koch, Barbara
Lambert, Larason & Juanita
Lenhart, Jean
Miller, Don & Linda
Montgomery, Bob and Elaine
Pearson, Bud & Laveme
Polchow, Margaret Ann
Prim, Lucy and Bob
Ulinski, Anne

Highlands, N.C.
Davis, Charlton & Patricia
Landwehr, Barbara

Horse Shoe, N.C.
Hudelson, Francis
Humphrey, Pam

Lake Toxaway, N.C.
Allen, Barbara D.
Dziedzic, Betty

Landrum, N.C.
Ewing, Ann

Lexington, N.C.
Fisher, Don

Long Boat Key, FL.
Blackwell, Rusty

Marion, N.C.
Goldsmith, James W.

Mills River
Trapp, Carolyn

Norcross, Ga.
Arrington, Daisy

Ormond Beach, FL.
McDaniel, Lois

Pisgah Forest, N.C.
Goldthwaite, John & Sheila
Hauschild, Linda
Koelling, Karen
Smith, Helen M.
Spencer, Kim

Saluda, N.C.
Pearson, Millie

Spruce Pine, N.C.
Gray, Gussie

Stone Mt, Ga.
Lennox, Susan & David

Suwanee, Ga.
Drake, James P. (Jim)

Sylva, N.C.
Miller, Earl & Bettye
Stenger, Gloria

Tryon, N.C.
Jenks, Mary Clare

Travelers Rest, S.C.
Prickett, Ema

Waynesville, N.C.
Couric, Elrose/Hollinger, Sue
Fitts, Jackie
Thomas, Jane

*Some members are summer visitors
My Search for the Illusive Mountain Camellia

I love a good horticulture mystery. A few years ago an Atlanta garden writer published a story that was so intriguing that I could not wait to try to solve it. He wrote that someone in north Georgia had invited him to see one of the most beautiful and rare flowers in the world. It was the mountain camellia. No mention of a botanical name but there were a couple of clues. First, it surely had to be a native, and second it had to bloom in the summer. I went through my collection of books looking for the mountain camellia but as common names are rarely a good way to research. I knew my first job would be to find the botanical name.

As I commonly do when I don’t know a botanical name, I either carry a personally dried herbarium sample or a picture of the plant in a jar of water if I think I might be near some learned person who could help me. This time though I only had a common name. I thought there might be a good chance of it being a Gordonia or a Stewartia and after a good read of Dirr’s Manual of Woody Landscape Plants, I finally learned the name, Stewartia ovata. At least now I knew what I was looking for. Then the search began.

At that time we did not have the privilege of the internet so I went to every specialty nursery and asked everyone I knew if they had the plant and every one tried to sell me a Stewartia japonica. All of my friends knew I was looking for a Stewartia ovata. For a couple of years I continued my search finally buying three named plants at a reputable nursery that turned out to be Stewartia japonica for $50 each. I gave one to a friend as Stewartia ovata so she thought I had finally found this illusive plant. But we both learned soon that we had the most common one in the trade.

Last summer Jackie Fitts, who lives in Waynesville, was reading the paper and saw a picture of the long sought after flower and an article followed that the Land Trust for the Little Tennessee River was going to hike to see it on the following weekend. We were up at daylight and couldn’t wait to get there. It was an easy walk and the flower right at eye level was truly one of the most beautiful of all flowers. The most astonishing thing to me was the people on the hike thought of it as pretty common and had it growing in their gardens and offered everyone plants. So my search finally paid off true to my motto, never give up.

-Barbara Allen

Do you want to see this rare flower? The Land Trust for the Little Tennessee has scheduled a trip to see them in bloom on June 26. The site is on Highway 28 about 11 miles north of Franklin. We are welcome to join the group. Send an e-mail to Kate Parkerson at <KParkerson@ltnr.org> for more information. (Kate estimates it will take about two hours to get there.) -Ed.

Stewartia ovata ia a small tree mostly concentrated in the s. Appalachians and interior plateaus of e. KY, south to AL, n. to Georgia and adjacent NC, SC, though also ranging into the Piedmont of NC and the coastal plain of VA. Uncommon to rare over most of its range. -from Ron Lance’s “WOODY PLANTS of the Southeastern U.S.” (2004) -Ed.
Did You Know?

Last year the United Nations Environment Programme (UNEP) launched a major worldwide tree planting campaign. Under the "Plant for the Planet: Billion Tree Campaign", people, communities, business and industry, civil society organizations and governments were encouraged to plant at least one billion trees worldwide each year and register them with UNEP.

Now the UNEP has set a new goal of planting 7 billion trees by the end of 2009. The campaign strongly encourages the planting of indigenous trees and trees that are appropriate to the local environment.

In 2008 the Botany Club joined with the Bullington Center in planting a tree for the planet, a cucumber magnolia (*Magnolia acuminata*) on Bullington grounds. The tree was registered with the UN and the site appears on the UNEP worldwide map.

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The traditional way to identify an unfamiliar tree is to pull out a field guide and search its pages for a matching description. One day people may pull out a smartphone instead, photographing a leaf from the mystery tree and then having the phone search for matching images in a database.

A team of researchers financed by the National Science Foundation has created just such a device — a hand-held electronic field guide that identifies tree species based on the shape of their leaves. The field guide, now in prototype for iPhones and other portable devices, has been tested at three sites in the northeastern United States, including Plummers Island in Maryland and Central Park in New York. The computer program compares the leaf snapshot to a library of leaf images.

"We believe there is enough information in a single leaf to identify a species," said John Kress a member of the research team. "Our brains can't remember all of these characteristics, but the computer can." The tree guide will be specific to trees and shrubs of the northeastern United States.

A warning comment came from another scientist who believes in traditional education, too. "People don't have to take botany for four years, but we shouldn't lose sight of the value of learning information. If a computer can figure it all out, we can get lazy."

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For the past several years, students from Western Michigan University and the University of Michigan have chosen to participate in an Alternative Spring Break program. This year for two weeks in March, the students helped to restore a Hoke County forest in the N.C. Sandhills by planting 30,000 longleaf pine seedlings.
Hornbeams & Hophornbeams

*Carpinus caroliniana* and *Ostrya virginiana*

Hornbeams and hophornbeams share many characteristics and often are difficult to tell apart. The following is excerpted from a recent issue of the Georgia Botanical Society newsletter.

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*Carpinus Caroliniana*, American hornbeam, ironwood, musclewood, blue beech, water beech

**Taxonomy:** American hornbeam is in the birch family (Betulaceae), a medium-sized group of trees and shrubs with 6 genera and about 105 species. Five genera occur in North America: birches (*Betula*), alders (*Alnus*), hornbeams (*Carpinus*), hophornbeams (*Ostrya*) and hazelnuts (*Corylus*). *Carpinus* is the ancient Latin name for hornbeam and *caroliniana* means of North or South Carolina. The tree’s name “horn” means tough and “beam” describes the wood which is close-grained, very hard and heavy.

**Appearance:** A small tree, 20-40 ft. high, up to 2 ft in diameter; short, irregular; often twisted, fluted trunk; crown close, flat-topped with long slender, zigzag branches.

**Leaves:** Deciduous, alternate, simple, oblong-ovate 2-4 in long, 1 - 1/2 - 2 inches wide, upper surface dark green, dull, mostly smooth with a few hairs along the main rachis, very scattered over rest of surface; main lateral veins prominent, slightly indented; lower leaf surface lighter green, shiny, surface glabrous with appressed hairs only on rachis and lateral veins, leaf margin double serrate, teeth acute.

**Flowers:** Borne separately on the same tree. Male flower in catkins; female in spikes or short catkins.

**Fruit:** Nutlet at base of 3-lobed leafy bract; some in a spiral to form a cluster.

**Habitat:** Mostly understory tree in hardwood forests on moist or wet soils along creeks or rivers. Is an excellent small landscape tree. The Club has identified it at FENCE, Davidson River, Pearson’s Falls, Horse Cove, Moore Cove Trail, Green River Cove, Palmetto Trail, Shinn Garden and Paw Paw Cove.

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

*Ostrya virginiana*, Hophornbeam, American hophornbeam, ironwood

Taxonomy: The hophornbeams are a small genus of only eight species of the birch family; one species in Mexico, Europe and western Asia; three in eastern Asia and Japan; three in the United States and Canada. *O. virginiana* is widespread in the Eastern U.S. *Ostrya* is the Greek name for a tree with very hard wood. The species name *virginiana* means "of Virginia". Hop refers to the fruit which resembles hops, and hornbeam refers to the very tough, hard wood, (second in hardness only to dogwood).

Appearance: Small tree, usually 20 to 35 feet high (sometimes up to 70 ft.), diameter 6 to 25 in; large rounded crown and cylindrical trunk.

Leaves: Deciduous, alternate, simple, 2-5 in long, 1-2 in wide, elliptical to ovate. Main veins prominent and much indented in leaf surface; color lime green, dull wrinkled (rugose), more hairy than *Carpinus* with appressed hairs on surface and tangled hairs on rachis. Lower surface only slightly lighter than upper; dull, wrinkled (rugose), prominent interconnecting veins between main lateral veins; lower opposite veins opposite. Leaf base rounded to heart-shaped, tip acuminate; leaf margin single to doubly serrate, teeth acuminate, 3 mm long.

Flowers: Borne separately on the same tree; male in catkins, female in spikes or short catkins.

Fruit: Nutlet, borne in a bladdery sac, form a cluster resembling a hop.

Habitat: Slopes and ridges, occasionally in bottoms; usually understory species with hardwoods. Abundant on limestone ridges and slopes. An excellent small shade tree. There are no records that the Club has seen this tree on any field trips.

How to tell them apart:
- Hornbeam bark is smooth, dark grey. Fluting trunk looks muscular. Leaves upper surface mostly glabrous, under leaf shiny. Fruit an exposed nutlet.
- Hophornbeam bark is rough shredded, flaking and turning loose at free ends. Leaves upper surface wrinkled and hairy. Lower leaf dull. Fruit enclosed by a bladder sac.

![Lead, twig, enlarged bud at end of twig showing leaf scar and twig star, enlarged twig with catkins.](image-url)
SHORTIA

A quarterly publication of the Western Carolina Botanical Club

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Editor: Anne Ulinski
Editorial Assistant: Jean Lenhart
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