SHORTIA

NEWSLETTER OF THE

WESTERN CAROLINA BOTANICAL CLUB

SPRING 2004

Shortia galacifolia

Oconee Bells
FROM THE PRESIDENT...............................................................Bonnie Arbuckle

At our meeting on January 8, 2004, the announcement was made that the next annual meeting will be during the summer of 2005. This was favorably received by those few who, in spite of icy roads and generally bad weather, were able to attend. A summer meeting will enable our “summer” members to attend and will free us from a cancellation because of inclement weather. The officers elected this year will, therefore, serve for the next eighteen months.

Two people will serve as secretaries: one will record minutes of meetings, the other will be responsible for the telephone tree and correspondence. This is also a transition year for the recorder. For over five years Betty Jones has served faithfully, keeping accurate, up-to-date records of plants found on botanical field trips. During this time she has greatly improved our plant identification records, updated many of the botanical name changes, and has begun to add plant families to our field trip lists. Now we are fortunate to have Ken Borgfeldt volunteer his computer skills to continue her excellent work. This year they will work together to ensure a smooth transition.

“Being Historian of the WCBC is not really a job but an opportunity to document relevant botanical findings, and, just as important, documenting people and their reactions to some of the best things Mother Nature has to offer!” This comment from Chris Borgfeldt reflects the feelings of the many talented people who have compiled our scrapbooks over the years. Suzanne Huie will continue the tradition, and asks you to share your photos with appropriate notes of dates and identities of plants and photographers.

The new board met in late January to talk about job responsibilities and make plans for another successful year. A written description of each office will be compiled and kept in a folder. This will assist the nominating committee when they ask people to serve. Other plans for the club’s future that were discussed included another book sale and places for a fall overnight field trip. Your suggestions and ideas are always welcomed and can be made by contacting any of the officers.

The snow that covers the ground today is keeping the spring flowers warm. I look forward to seeing them soon.

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.

Nancy Iha, Brevard. Nancy is a member of the Georgia Botanical Club, worked on a project last summer on Swamp Pink, and is a Master Gardener volunteer.

Jenny Lellinger, Brevard. Jenny and her husband, Dave, moved here from Northern Virginia. Jenny worked for the National Geographic Society for over thirty years. She is a graduate of the USDA School of Natural History Field Studies program with a specialty in fern and fern allies. Dave spent his entire career at the Smithsonian Institution where he specialized in ferns and fern allies and was curator of the Smithsonian pteridophyte collection.

Patricia Sentell, Columbus. Pat reports she has had a life long passion with wildflowers. Last summer she worked for four months in Yellowstone National Park enjoying every flower from lupine to cactus.

Dee Henry, Columbus.

Award

Botany Club member, Elisabeth Feil, received the Trillium Award from the Botanical Gardens at Asheville. The award, which was presented to Elisabeth at the Gardens annual meeting on February 1, was “in recognition for dedication and service above and beyond expectations.”

Indoor Program Cancellations

The Botany Club indoor programs at the Sammy Williams Center will be cancelled if the Henderson County Schools are closed. For school closings telephone 828-697-4733 or check the web site <www.henderson.K12.nc.us>.

Western Carolina Botanical Club
(Consolidated)

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Income Over Expenses $525

Respectfully submitted, Bonnie Arbuckle, Treasurer
Can you identify the location of twelve of our 2003 field trips from the hints provided below? Locations are listed at the bottom of this page — just match them to the descriptions. Answers are on page 5.

1. A botanically rich site - *Cynoglossum virginianum* (Wild Comfrey) and *Delphinium tricorne* (Dwarf Larkspur) blooming next to the road.

2. *Eleocharis quadrangulata* (Four-angled Spikerush) and *Spiraea tomentosa* (Hardhack) near a lake.

3. *Chelone obliqua* (Red Turtlehead) and *Parnassia asarifolia* (Grass-of-Parnassus) are found here.


5. Dry location where we found *Ipomoea pandurata* (Wild Potato Vine), *Lechea racemulosa* (Pinweed), *Lobelia nuttallii* (Nuttall’s Lobelia), *Platanthera ciliaris* (Yellow Fringed Orchid) and *Talinum teretifolium* (Fameflower).

6. *Philadelphus inodorus* (Mock Orange) on the hillsides; one of few locations where we see *Dodecatheon meadia* (Shooting Star) and *Isotria verticillata* (Whorled Pogonia).

7. Home of *Carex misera* (Wretched Sedge), *Robinia hartwigii* (Hartwig’s Locust) and *Solidago simulans* (Granite Dome Goldenrod).

8. A WCBC favorite site with *Hybanthus concolor* (Green Violet) in bud and *Saxifraga virginiensis* (Early Saxifrage) blooming on the dripping rock overhang along the trail.

9. Photo opportunity for these plants: *Asclepias variegata* (White Milkweed), *Calopogon tuberosus* (Grass Pink), *Lindernia monticola* (Piedmont False Pimpernel), *Sarracenia rubra ssp. jonesii* (Sweet Pitcher Plant) and *Utricularia comuta* (Horned Bladderwort).

10. *Aconitum uncinatum* (Monkshood) on the roadside and *Delphinium exaltatum* (Tall Larkspur) along the trail.

11. Popular site to find *Allium cernuum* (Nodding Wild Onion), *Campanulastrum americanum* (Tall Bellflower) and *Smilax tamnoides* (Bristly Greenbrier).

12. A new location for the club; two noteworthy plants identified: *Goodyera repens* (Lesser Rattlesnake Plantain) and *Cypripedium parviflorum* (Smaller Yellow Lady’s Slipper).

A. Peach Orchard Branch  B. Pearson’s Falls  C. Coleman Boundary  D. Tanbark Tunnel  
E. Cabin Cove at Fine’s Creek  F. Ashmore Heritage Preserve  G. Whiteside Mountain  
H. Kanuga Conference Center  I. Bee Tree Gap  J. Sky Valley Road  K. Heintooa Area  
L. Log Hollow Overlook along the Blue Ridge Parkway South  
p.3
Hemlocks in Danger

“A bug is literally sucking the life out of hemlocks throughout the east,” writes Forestry Technician, Irene Von Hoff, in a recent issue of “Connemara Comments”, the Carl Sandburg Home NHS newsletter. She continues:

The Hemlock Woolly Adelgid (HWA) is a tiny aphid-like insect with a big appetite --big enough to potentially wipe out the Eastern and Carolina Hemlock. It has devastated hemlock forests from Massachusetts to North Carolina and continues to move westward invading the natural range of hemlock, while leaving in its wake a barren landscape where lush green hemlocks once shaded cool mountain streams teeming with trout. Foresters warn that if effective controls are not found and applied, the outcome of the adelgid may be as disastrous as that of the chestnut blight which eliminated American chestnut from eastern forests.

...the adelgid is very small and difficult to see, but adults carry a white woolly ball on their backs making them more visible to the observer. Look on the underside of the branches where the needles are attached to the twig. If you don’t see the white fuzz on the first few branches you check, keep looking. An early infestation may be localized on one or two branch tips.

Carl Sandburg Home National Historic Site first discovered HWA on their trees in 2001 while the trees were being inspected for another insect problem, elongate hemlock scale (EHS). In response to the invasion, the trees were sprayed with an insecticidal soap, M-Pede, which is very effective.

Irene goes on to explain that the spraying process used in 2001 was found to be not feasible for the park because spraying would have to be done every two weeks to gain good control of the pests. It would have taken too much time, human resources, equipment rental and visitor inconvenience to treat the 240 infected trees. In 2003 they used an insecticide-miticide, Abamectin, which was injected and thus transported to the limbs, twigs and foliage where the Adelgid sucks up the insecticide with the plant juices. Trees are protected for a year and would need to be treated annually. This year the insect infestations on the 12 trees injected will be compared with those which were not treated. If the results are favorable, the park plans to treat the rest of the hemlocks with the insecticide/miticide.

If you have hemlocks on your property, especially if you live in the Flat Rock area, you may want to check for this white woolly insect. If you find it, you can call the agricultural extension agent or the Division of Forest Resources. For more information go to hemlock woolly adelgid on a website.

Irene Van Hoff was our speaker at a recent indoor meeting. The above was printed with her permission.
Historian

Have you ever wondered why there always seems to be some "shutterbug" taking pictures at our club meetings and field trips? Chances are the person snapping all those photos was the club Historian. Every historian since the club's inception more than 30 years ago has been charged with providing a photojournalistic record of the club's activities. These records are in a scrapbook format and provide club members an interesting and sometimes entertaining visual/written account of club activities, field trip highlights, officers, social events, and other club information.

The club's 30+ year historical record is contained in several volumes of photo albums that are available for members' review at the Annual Meeting and the Holiday Cookie Fest. The Historian also brings some of the more recent volumes to the indoor winter sessions for members to review at their leisure.

Often other members contribute photographs for inclusion in the album. This is most welcome as the Historian sometimes misses a meeting or outing, or was not able to capture a noteworthy highlight or activity. It is recommended that when other club members contribute photos for the historical record, the photo be identified with the date, person taking the photo, field trip name, and other identifying information (e.g., people in the photo, name of the plant/flower, etc.). This information is most helpful when the photo is being considered for inclusion in the scrapbook. We use only one scrapbook per year so it is not possible to include all photographs. Please don't let that deter you from submitting them. Any unused photos will be returned to you.

If you would like more information, please contact Suzanne Huie, the 2004 WCBC Historian. -Chris Borgfeldt

Botany club members who have been historians in past years and have added to the photo albums are: Louise Foresman, Anne Mathes, Dana Herman, Larry and Anna Ballard and Chris and Ken Borgfeldt. -Ed.

In all things of nature there is something of the marvelous. -Aristotle

Answers to quiz on page 3:
1-C  2-H  3-L  4-A  5-J  6-D  7-G  8-B  9-F  10-K  11-I  12-E

p.5
Blood-root - *Sanguinaria canadensis*


*General:* **Time of bloom:** April, May. **Flowers:** Terminal, solitary, growing on a naked scape. **Fruit:** An oblong pod. **Leaf:** One only, from the base, rounded, palmately lobed, veined. **Root stock:** Fleshy and, as the stalks, containing a blood-red juice.

The blossom of the blood-root is one of the most carefully guarded of Nature's children. It's sweet loveliness is not thrust ruthlessly upon the world to make its way the best it can. The leaf is carefully wrapped about the flower bud, and not until the former is assured of the temperature and fitness of the surroundings, does it unfold and allow the scape to stretch upward bearing the beautiful flower, and how fair it is only those can know that have seen it unfold its pure, spotless petals. Indeed, it is too fragile for the rocky hillsides. The wind carries off its petals and those that seek it often sigh to find it has already perished.

It seems strangely incongruous that the fluid of this plant with its unusually pure blossom should have been used so extensively by the Indians to paint their faces.

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This article was submitted by club member, Millie Pearson. It was taken directly from *A Guide to the Wild Flowers*, by Alice Lounsberry, published in 1899 by Stokes Company, New York

**Pearson's Falls**

By saxifrage and trillium
By violet and by rue,
Such tiny, fragile flowers
We passed them - me and you.

We walked in the wet morning
And in awakening spring.
We felt old Nature's promise
And heard the river sing.

-Walter Davies

This poem was written by a former botany club member and appeared in the *Shortia* Summer 1997 issue. A field trip to Pearson's Falls is scheduled for Friday, April 2. Millie Pearson will be our leader and her sister, Odessa Galda, the co-leader.
Joseph Banks: A Life
by Patrick O'Brian

The botanist, Linnaeus, once suggested that the new country we now call Australia be named "Banksia." Who is the man that inspired such recognition?

We were introduced to Joseph Banks (1743-1820) by Bonnie Arbuckle in 2000 at a "Learn and Share" session when she talked about the species of plants called banksia and displayed a vase made from a banksia seed pod. Now Patrick O'Brian has written a biography of the brilliant naturalist, explorer, and president of the Royal Society. Making full use of Banks' letters and journals, O'Brian transports us to the world of 18th century scientific research and exploration.

The biography recounts Banks' voyage to Australia with Captain Cook and tells of his friendships-- with fellow scientists throughout Europe as well as with both King George III and the infamous Captain Bligh. And the description of the arduous three-year voyage with Captain Cook helps us understand life on a wooden ship with 94 men, two dogs, a cat and a goat. Banks' writing spins out a web that draws you into his world. You sail with Cook, bow to George III, obtain a ship for Captain Bligh, botanize among the cannibals. It is high adventure with botany on the side.

Do read the book and see the movie, "Captain and Commander", based on a novel by the same author. In this story a French and a British sailing ship duel it out in sailing maneuvers and bloody battles, and there is a naturalist aboard the British ship! Except for the wartime setting, his experiences could be those of Banks on the Endeavour with Captain Cook exploring Australia.

I recommend the movie and the book. Enjoy!  

-Jeanne M. Smith

The Endeavour's route to New Zealand and Australia - part of its round-the-world voyage 1768-1771
Banksia

Banksia is a genus of 75 species in the Proteaceae family. All of the species occur in Australia with one, *Banksia dentata*, extending to islands to Australia’s north. Banksias can be found in most environments: the tropics, sub-alpine areas, the coast and desert. Most banksias are medium shrubs but some are prostrate and a few can become large trees. The flowers are made up of hundreds (sometimes thousands) of tiny individual flowers grouped together. The colors range from yellow to red.

Archaeological evidence suggests that banksias or *Banksia*-like plants have existed for over 40 million years. The first humans to discover and make use of them were the Australian aborigines who used the nectar from the flowers as part of their diet.

The first Europeans to observe banksias were probably Dutch explorers who made several landings along the West Australian coast during the 17th and 18th centuries. No botanical collections were made, however, until the discovery of the east coast of Australia by Captain James Cook and his crew aboard the *Endeavour* in April 1770. It was the two naturalists aboard the *Endeavour*, Joseph Banks and Daniel Solander, who collected four species of the new genus later to be named banksia in honor of Joseph Banks’ contribution to botany.

The site where the banksia plants were found yielded a total collection of 94 new plants. The number was so unusual and impressive that Captain Cook named the site Botany Bay, a name which exists to this day.

Banksia plants are in much demand in present-day Australia for gardens, landscaping and even for flower arrangements.

The name banksia is common in Australia. A recent headline announced that “Banksia has merged with NetComm”. There is a Banksia Environmental Foundation which promotes environmental sustainability, a Banksia Secondary College, a software “Banksia”, Banksia Adventures (a travel agency) and even a Banksia wine. Joseph Banks would be surprised to find his name used so prominently on the continent he helped explore so many years ago. 

-Anne Ulinski

From top:
*Banksia serrata*
and
a banksia tree
SHORTIA

Vol. XXVI. No. 1

SPRING 2004

A quarterly publication of the Western Carolina Botanical Club

Editor: Anne Ulinski
Editorial Assistants: Pat Arnett and Jean Lenhart
Art Work: Pat Arnett
Member News: Ruth Anne Gibson

Please submit contributions for the next issue by May 15, 2004 to: Anne Ulinski
1212 Chanteloupe Drive, Hendersonville, N.C. 28739

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. Please send dues to: Larry Avery, 4 Windrush Lane, Flat Rock, N.C. 28731