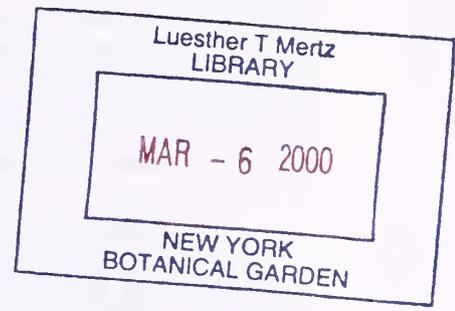
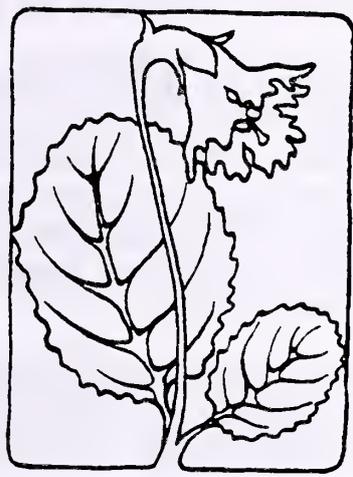


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SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
SPRING 2000



Shortia galacifolia
Oconee Bells

WESTERN CAROLINA BOTANICAL CLUB - 2000

President: Anne Ulinski
Vice President: Bonnie Arbuckle
Secretary: Peggy Ellis

Treasurer: Rachel Conway
Recorder: Betty Jones
Historian: Anne Matthes

From the President.....Anne Ulinski

As I write this on the first day of February the ground is covered with a form of water which can only be called icy snow. The crust is so firm that eight squirrels are happily running around on the surface scavenging seeds under the bird feeders.

We seldom think of water except when too little falls from the sky and we have a drought or too much falls and causes floods. At certain temperatures the water turns to snow which most of us like, or ice, which isn't much fun.

More than 70% of the surface of the earth is water. It may be in the form of ice and snow on the highest peaks of the Himalayas or as salty water in the low elevation Salton Sea in California. Ninety-six percent is in the oceans and three percent is fresh water found in glaciers, lakes, ground waters, rivers and the atmosphere. With the world population increasing and putting a greater strain on our natural resources we need to remember that all the water that will ever be is, right now.

Walking along Sky Valley Road this past summer we, in the Botanical Club, were acutely aware of the lack of rainfall. The rock outcrops were so dry that the plants we always look for such as *Lobelia nuttallii*, Nuttalls' Lobelia, and *Talinum teretifolium*, Fame Flower were hardly recognizable. The Grass-leaved Golden Asters, *Pityopsis graminifolia*, were covered in dust. The three members who scouted the field trip a few days earlier had a rare close look at a very large timber rattlesnake which came to the road probably looking for a water source.

They say that nature can live without us, but we can't live without nature. So I am trying to take a kindly look at the inconvenience this weather brings by realizing the ice and the snow will melt and nourish the earth including the Fame Flowers, the Golden Asters and the timber rattlers.

oo

There have always been changes in the scientific names of plants but recently with the many chromosomal studies, there are more changes than ever. Our recorder, Betty Jones, has put together a list of "new" plant names -- names used in the 1999 plant lists which differ from previous lists (see p.7). The name changes are drawn from Wildflowers of the Southern Mountains by Dick Smith. There will be more about plant name changes in the Summer issue of Shortia.

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.

WESTERN CAROLINA BOTANICAL CLUB ANNUAL MEETING MINUTES

January 14, 2000 St. John Episcopal Church Hendersonville, NC

Attendance:32

The meeting was called to order by Anne Ulinski, President at 11:15 am. A reading of 1999 annual meeting minutes by Peggy Ellis was followed by the treasurer's report by Rachel Conway. Both were accepted as read. (Treasurer report is attached)
December 31, 1999 Balance on hand \$1770.73

Elton Hansens, acting as auditor, confirmed the accuracy of the treasury account and his statement is attached.

Erika Parmi read the recorder's report for Betty Jones who is out of town. The 1999 Champion walk was Tanbark Tunnel to Bull Gap with 80 species identified. (Full report attached)

Anne goes over the history of the Harry Logan bequest which is presently exhausted which means the cost of printing Shortia will now come out of the membership dues.

Old Business: The dues increase last year was timely to continue to cover the expense of printing plant lists and Shortia. Anne will submit a budget for 2000 to the Executive committee for approval. Financial goal: to cover all expenses without drawing down the bank balance.

A report of Public Service Projects was given by Anne. Several projects have been done over the years. The current project, in conjunction with the U.S. Forestry Service, is to collect botanical data along two trails at the Cradle of Forestry -- Biltmore Campus Trail and Forest Festival Trail. The goal is to promote the knowledge of native plants by using plant species data collected for designing wildflower brochures.

Membership: Even though we cannot handle many people on each walk because of the fragility of the trail, membership numbers need to be maintained and increased. Areas we may be able to advertise: Henderson County Library in one of the display cases, The Opportunity House and/or Prime Time Publication. Any other suggestions are welcome.

New Business: Elaine Montgomery gives a report of the nominating committee which consisted of Elaine, Don Herrman and Lowell Orbison. Nominations as follows: Anne Ulinski, Pres., Bonnie Arbuckle, V.P., Peggy Ellis, Sec., Rachel Conway, Treas. Helen Smith made a motion to approve, Pat Arnett seconded the motion and all were elected unanimously. Also mentioned are the appointed positions of recorder and historian remain as Betty Jones and Anne Mathes respectively.

A preview from Vice President, Bonnie Arbuckle of the upcoming field trips. She highlights the 3 day trip to Fontana Village in May. There are flyers available to make overnight reservations for the trip. Elisabeth Feil has secured reduced rates for our trip to Chimney Rock.

Helen Smith goes over the Learn and Share program scheduled for March 17th. Six people are needed to give a short presentation for the club on any subject they prefer.

Award Presentation: Don Herrman is presented with an honorary broom for his long time devotion to be "the sweeper" on our walks, keeping us all in line and on line.

Meeting adjourned.

Respectfully submitted, Peggy Ellis
January 14, 200

Book Review.....Jean Lenhart

Noah's Garden: Restoring the Ecology of Our Own Back Yards
Sara Stein, Houghton Mifflin, 1993

This is a personal perspective of the author's conversion from conventional gardener to ecologist. Her plans for transforming the barren and impoverished lawns of countless sub-divisions across America lead toward more natural and ecologically sound gardens in which snakes are as welcome as butterflies.

The author, who lives with her husband on six acres in New York, began to question conventional practices -- large lawns surrounded by neat beds of flowers and occasional specimen plantings -- when, a few years ago, she noticed the absence of many creatures she could recall from childhood. Creatures like orioles, bluebirds, box turtles, and butterflies, once common, were seen no more.

Stein began reading books and consulting experts, and decided to try to reverse the trend by changing the way she maintained her own land. She planted shrubs and trees, native to the region, that would encourage birds and beneficial insects to return. She deepened her pond so that aquatic life could flourish in purer water; replaced most of her flower beds with native flowers and shrubs; and restricted her lawn to a small patch, seeding the old lawns with native grasses. Stein argues forcefully that the old methods of gardening not only require tremendous amounts of labor and chemicals to keep exotic plants alive but are detrimental to native species. Although neither town covenants nor legislation on a large scale will restore our vanishing ecosystems, she says, each of us can plant a piece of native grassland or put up a bluebird box and edge our property with fruiting shrubs rather than exotic ornamentals. To provide passageways for the smaller creatures, we could build terrace walls of dry stone rather than masonry ones.

Hers is a persuasive plea to defy old wisdom and change the way we garden, suggesting just what can be achieved even on the smallest lot.

As the author warns, "If we don't grow milkweeds in our gardens, we'll have to tell our grandchildren, 'We used to see Monarch butterflies long ago.' "

WESTERN CAROLINA BOTANICAL CLUB

Treasury Report

Year Ending December 1999

January 1, 1999 - Balance on hand \$1797.65

<u>Receipts</u>	<u>1999</u>	<u>2000</u>		
Membership dues	960.00	+ 264.00	=	\$1224.00
Donations				48.00
				<u>\$ 1272.00</u>
				1272.00
				<u>\$3069.65</u>

Disbursements

Membership Lists - inc. postage	70.48
Program Schedules " "	211.09
Plant Lists	64.21
Shortia " "	439.98
(Above - our greatest expense \$785.76)	
Misc. Items - copying & supplies	49.49
Treasury - Postage & supplies	30.43
St. John in Wilderness - Reservations	75.00
Annual Meeting supplies	8.24
Christmas Cookie Fest - supplies	35.00

Contributions

Botanical Gardens at Asheville	50.00
The Nature Conservancy - rebuild bridge	50.00
Preservers of the Parkway in	
Memory of Dick Smith	200.00
Dick Smith's Book to Cradle of Forest	15.00
	<u>\$1298.92</u>
	1298.92

December 31, 1999 - Balance on hand \$1770.73

I would like to mention a member absorbed the cost of copying for the club in memory of Dick Smith in the amount of \$100.00

Re: Harry Logan's Bequest

Those funds were exhausted in October and are now being paid out of our regular budget.

Respectfully submitted,

Rachel M. Conway
Rachel M. Conway - Treasurer

01-14-2000

RECORDER RAMBLINGS THE YEAR 1999Betty Jones

This year, my first as your club Recorder, has been a year of growth for me. I can finally identify some plants without having to refer to the field guides, the Latin names tumble off my tongue with a bit more ease, I have walked new paths, and, best of all, I have had the pleasure of doing this with people who share my interest and whose company I enjoy.

Forty-three field trips were scheduled in 1999. Five of those were cancelled - all in the first half of the year. Attendance continues to keep pace with that of prior years with an average of nearly 16 people per trip. Twenty-six of the 38 field trips had an attendance of 11-20 people. Seven trips were in the 6-10 range, four in the 22-25 range and highest attendance was at the Holmes picnic which was attended by 32 people.

1999's champion outing was the May walk from Tanbark Tunnel to Bull Gap. A whopping 80 species were identified, 60 in bloom, and all this in spite of the rain! Two strong runners-up were the North Carolina Arboretum in May and the Buck Springs trail in July: 75 species were identified on both walks.

This is the first year that we have made a serious effort to record non-blooming plants as well as those in bloom. This has encouraged us to look not only at the inflorescence of a plant but its other features as well: leaves, stem, fruit or seeds, etc. Moreover, we have added ferns and some mosses to many of our checklists.

We do continue to record the number of species in bloom. In this category, our three champion walks were the North Carolina Arboretum with 67 blooming plants, Lake Issaqueena with 65, and (once again) Tanbark Tunnel to Bull Gap with 60.

As might well be expected, our lowest blooming counts were for our latest and earliest walks. Our last walk of the season at Jones Gap State Park produced a single blooming species, some fading witch hazel, and the Hardy Souls walk at Andy Cove produced two bloomers: a bitter cress and trailing arbutus.

Plant highlights of the year were: Rocky Mountain Woodsia (*Woodsia scopulina*) at Glassy Mt. Preserve; the Whorled Pogonia (*Isotria verticillata*) at Tanbark Tunnel; Ramps (*Allium tricoccum*), Tennessee Chickweed (*Stellaria corei*) and Cream-colored Wake Robin (*Trillium erectum*) on the Graybeard Mt. Overlook to Glassmine Falls trail; the Gray's Lily (*Lillium grayi*) and Spreading Avens (*Geum radiatum*) at Roan Mountain; Biltmore Carrion Flower (*Smilax biltmoreana*) at the Herrman's place; and finally, the magnificent displays of *Clintonia borealis*, *Maianthemum canadense* and *Smilacina racemosa* at Big Butt.

I received reports for EVERY walk this year and also a few scouting reports for walks that were cancelled. My sincere thanks for your cooperation.

WCBC Plant Names - "Old" vs. "New"

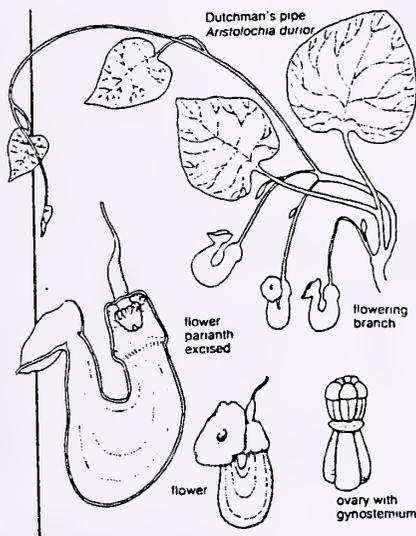
Note: All of these "new" plant names appeared on checklists in 1999.

"Old" Name	"New" Name	Common Name
<i>Aesculus octandra</i>	<i>Aesculus flava</i>	Yellow Buckeye
<i>Arenaria groenlandica</i>	<i>Minuartia groenlandica</i>	Mountain Sandwort
<i>Aristolochia durior</i>	<i>Aristolochia macrophylla</i>	Dutchman's Pipe
<i>Cacalia atriplicifolia</i>	<i>Amoglossum atriplicifolium</i>	Pale Indian Plantain
<i>Cardamine heterophylla</i>	<i>Cardamine angustata</i>	Slender Toothwort
<i>Cassia fasciculata</i>	<i>Chamaecrista fasciculata</i>	Partridge Pea
<i>Cassia marilandica</i>	<i>Senna marilandica</i>	Wild Senna
<i>Cassia nictitans</i>	<i>Chamaecrista nictitans</i>	Wild Sensitive Plant
<i>Cassia obtusifolia</i>	<i>Senna obtusifolia</i>	Sicklepod
<i>Cerastium holosteoides</i>	<i>Cerastium fontanum</i> ssp. <i>triviale</i>	Mouse-ear Chickweed
<i>Cerastium vulgatum</i>	<i>Cerastium fontanum</i> ssp. <i>triviale</i>	Mouse-ear Chickweed
<i>Chrysanthemum leucanthemum</i>	<i>Leucanthemum vulgare</i>	Ox-eye Daisy
<i>Chrysopsis graminifolia</i>	<i>Pityopsis graminifolia</i>	Grass-leaved Golden Aster
<i>Dentaria diphylla</i>	<i>Cardamine diphylla</i>	Crinkleroot; Toothwort
<i>Dentaria heterophylla</i>	<i>Cardamine angustata</i>	Slender Toothwort
<i>Dentaria laciniata</i>	<i>Cardamine concatenata</i>	Cut-leaved Toothwort
<i>Erigeron canadensis</i>	<i>Conyza canadensis</i>	Horseweed
<i>Eupatorium aromaticum</i>	<i>Ageratina aromatica</i>	Smaller White Snakeroot
<i>Eupatorium rugosum</i>	<i>Ageratina altissima</i>	White Snakeroot
<i>Galinsoga ciliata</i>	<i>Galinsoga quadriradiata</i>	Peruvian Daisy; Quickweed
<i>Gentiana quinquefolia</i>	<i>Gentianella quinquefolia</i>	Stiff Gentian
<i>Habenaria ciliaris</i>	<i>Platanthera ciliaris</i>	Yellow Fringed Orchid
<i>Habenaria clavellata</i>	<i>Platanthera clavellata</i>	Small Green Wood Orchid
<i>Heterotheca graminifolia</i>	<i>Pityopsis graminifolia</i>	Grass-leaved Golden Aster
<i>Heterotheca mariana</i>	<i>Chrysopsis mariana</i>	Maryland Golden Aster
<i>Hieracium pratense</i>	<i>Hieracium caespitosum</i>	King Devil; Field Hawkweed
<i>Hypericum stans</i>	<i>Hypericum crux-andreae</i>	St. Peter's-wort
<i>Linaria canadensis</i>	<i>Nuttallanthus canadensis</i>	Old-field Toadflax
<i>Lychnis alba</i>	<i>Silene latifolia</i> ssp. <i>alba</i>	White or Evening Campion
<i>Lycopodium flabelliforme</i>	<i>Diphasiastrum digitatum</i>	Running Pine
<i>Orchis spectabilis</i>	<i>Galearis spectabilis</i>	Showy Orchis
<i>Oxalis acetosella</i>	<i>Oxalis montana</i>	Common Wood Sorrel
<i>Polymnia uvedalia</i>	<i>Smallanthus uvedalia</i>	Bearsfoot; Yellow Leafcup
<i>Potentilla tridentata</i>	<i>Sibbaldiopsis tridentata</i>	Wine-leaved Cinquefoil
<i>Rhus radicans</i>	<i>Toxicodendron radicans</i>	Poison Ivy
<i>Rhus toxicodendron</i>	<i>Toxicodendron toxicarium</i>	Poison Oak
<i>Senecio robbinsii</i>	<i>Senecio schweinitzianus</i>	Robbin's Ragwort
<i>Senecio smallii</i>	<i>Senecio anonymus</i>	Small's Ragwort
<i>Silene cucubalus</i>	<i>Silene vulgaris</i>	Bladder Campion
<i>Specularia perfoliata</i>	<i>Triodanis perfoliata</i>	Venus' Looking Glass
<i>Spiranthes gracilis</i>	<i>Spiranthes lacera</i> v. <i>gracilis</i>	Slender Ladies' Tresses
<i>Thalictrum polygamum</i>	<i>Thalictrum pubescens</i>	Tall Meadow Rue
<i>Trifolium agrarium</i>	<i>Trifolium aureum</i>	Hop Clover
<i>Uvularia pudica</i>	<i>Uvularia puberula</i>	Mountain Bellwort
<i>Viola eriocarpa</i> v. <i>eriocarpa</i>	<i>Viola pubescens</i> v. <i>leiocarpon</i>	Smooth Yellow Violet
<i>Viola eriocarpa</i> v. <i>leiocarpa</i>	<i>Viola pubescens</i> v. <i>leiocarpon</i>	Smooth Yellow Violet
<i>Viola papilionacea</i>	<i>Viola sororia</i>	Common Blue Violet

That was a very interesting article in the winter issue of *Shortia* by Paul Myers about the gingers -- deciduous in the genus *Asarum* and evergreen in the genus *Hexastylis*. These two genera together with the genus *Aristolochia*, are the only native members of the mostly tropical Birthwort Family. So let's get acquainted with this cousin of the gingers and we will know the whole family.

Aristolochia (ah-ris-to-LO-ki-ah) *macrophylla* (formerly *durior*) commonly called Dutchman's pipe or pipevine is a high climbing, woody vine much like the wild grape but easily distinguished by the light gray smooth bark and the large heart-shaped leaves. But it is the flowers which appear in early summer that are of greatest interest.

They are different, they are bizarre, they are whimsical, they are unlike any other flower. They look like....well.... a Dutchman's pipe! Make a special effort to see them this summer -- be amazed and laugh at these ridiculous flowers.



Sometimes the most interesting is the least obvious and so it is with the pipevine. The strange U-shaped tube offers a commodious chamber for the small carrion flies attracted by the unpleasant odor suggestive of rotting meat. The flies find no meat in which to lay their eggs. They find rather that they are held captive by the plant. Stiff downward pointing hairs on the wall of the tube prevent their escape.

When the flower opens only the style and stigma are functional. Pollination occurs when a fly comes in well dusted with pollen from a prior adventure in another flower. As soon as, but not before, the stigma is pollinated will the anthers develop and

release the plant's own pollen. The stiff captive flies soon get a dusting of pollen and then...guess what...the stiff hairs on the sides of the tube wither, setting free the captives with best wishes for a pleasant visit to some other flower.

This sequence of pollination (but without the captivity) is fairly common among plants. The relatively large size of the pipevine flowers makes it easy to observe the details. It is one among many devious methods plants use to prevent self-pollination.

Ain't Botany fun?!!

Bill Verduin, former President and long time member of the WCBC, now lives in Richmond, Virginia. Often a field trip leader, he introduced us to many new places such as Sky Valley Road and Heintooga and shared his knowledge of botany with all of us.

SHORTIA

Vol. XXII. No. 1

Spring 2000

A quarterly publication of the Western Carolina Botanical Club

Editor: Anne Ulinski
Editorial Assistant: Pat Arnett

Distribution: Ruth Hoerich

Please submit contributions for the next issue by April 30, 2000 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 \$12. New members joining from the period July 1-December 31, pay \$6. All memberships are renewable on January first of each year. Please send dues to:

Rachel Conway, Treasurer
211 Aldersgate Circle
Asheville, N.C. 28803

SHORTIA
c/o Ruth Hoerich
215 Newport Road
Hendersonville, N.C. 28739



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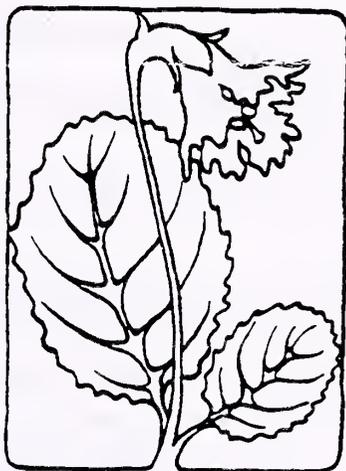
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SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
SUMMER 2000



Shortia galacifolia

Oconee Bells

Wilma Durpo: 43 Stonebridge Dr., Asheville, N.C. 28805.
(828) 299-0904. Wilma has recently moved from Covington, Georgia to "live in the mountains and learn botany."

Maxilla Evans, 694 Dogwood Trail, Waynesville, N.C. 28786.
(828) 456-6764. Maxilla helped establish the Corneille Bryan Nature Center in Lake Junaluska. Although unable to attend, she is looking forward to receiving Shortia.



Don Fisher: 33 Lantern Lane, Lexington, N.C. 27295. (336) 956-3512.
Don found the Botany Club through Elizabeth Feil. He enjoys hiking and nature. His interest is in rare plants.

Sue McLeod: 81 Campbranch Road, Black Mt., N.C. 28711. (828) 669-9483.
Sue has a business of designing native plant gardens. She says she has a passion for wildflowers.

Valerie Monroe: 6 Sandbridge Way, Waynesville, N.C. 28786. (828) 926-5267.
Valerie moved here from Sanibel Island, Fla. She is a retired social worker/counselor who decided to turn her attention from people to plants. Enrolled in a horticultural program at Haywood Community College, Valerie is also a gardener at the Corneille Bryan Nature Center in Lake Junaluska.

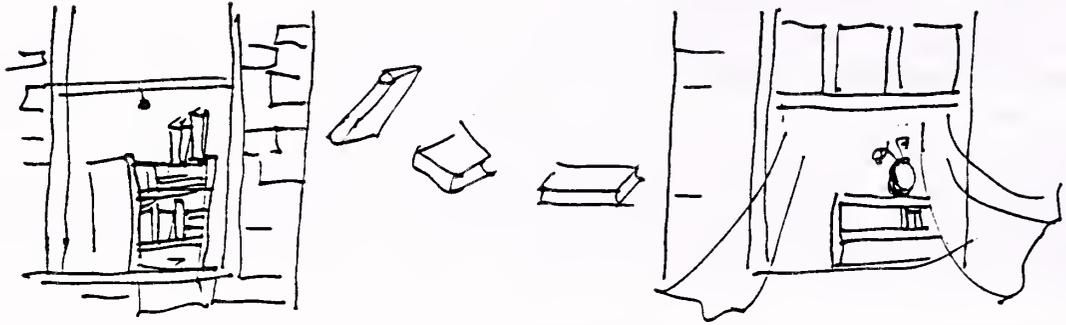
Eric and Peggy Moore: 124 Chickadee Lane, Brevard, N.C. 29712. 828-883-5505.
Peggy is a volunteer at Pisgah Ed. Center and also a nature guide at the Cradle of Forestry. When living in Charlotte she was head of the docents and of wildflower education at Winghaven, an English Garden/Bird Sanctuary in Charlotte.

Aleen Steinberg: P.O. Box 247, Cedar Mt., N.C. 28718. (828) 885-2477. Chick grew up in a small town in Wisconsin. She has always loved botany and wishes she had chosen that as her career. She was active in the Native Plant Society in Florida and is active here in the Sierra Club.

Jane and George Thomas: 617 Auburn Park Drive, Waynesville, N.C. 28786
(828) 452-4093. Jane and George each have a horticulture degree from the University of Georgia. George teaches at Haywood Community College. Jane is Director at Corneille Bryan Nature Center in Lake Junaluska. Jane went on the Shinn Garden field trip and liked our name tags.

Membership List- Year 2000

The membership list for the present year has been mailed. If there are any changes to your name, address or telephone number, please advise Ruth Hoerich (828)696-8063. To keep your membership list up-to-date, you will need to add the names which are listed above.



Book Sale

Do you have books on natural history (botany, geology, birds, mammals, etc.) which are duplicates or no longer needed? The Club is sponsoring a book sale at our annual meeting in January 2001. Donated books can be left with any of our officers. We need your books well before the sale so the sorting and pricing can be done. As well as making some books available to our newer members at lower prices, sales will help finance the public address system we bought this year for use at our indoor meetings.

The Poetry of Botanical Names

In all of our talk about the meaning of botanical names and the difficulty of learning them, we don't often take the time to listen to their sounds. Carolyn Goforth in her poem, "Gatherers" (see page 8 of this issue of *Shortia*) shares with us her delight in the poetry of plant names. "*Fragaria glauca*" and "*Potentilla fruticosa*" are two she liked.

If you listen you'll find many scientific names to delight the ear. It might be *Aureolaria laevigata*, *Parnassia asarifolia* or *Cheloni lyonii*. Or how about the name of the star flower we saw a few weeks ago --- *Trientalis borealis*? One of our Club members liked the way *Chrysanthemum leucanthemum* (Ox-eye daisy) rolled off his tongue. Unfortunately the name was later changed to *Leucanthemum vulgare*!

Botany Bookmarks



The USDA Plants Database is described as a single source of standardized information about plants, focusing on vascular plants, mosses, lichens, liverworts and hornworts of the U.S. and its territories. It is best viewed with Netscape or Internet Explorer 4.0 or greater.

The site features a plant of the week which for the week of May 25 was *Cephalanthus occidentalis* L., Common buttonbush. A click on the picture of the plant switched to a screen with the following information: Group-Dicot; Family-Rubiaceae; Duration-Perennial; Growth-Small tree, small shrub; Origin-Native. There was also an occurrence map, a list of states where buttonbush has been found and several other pictures of the plant.

Our Year 2000 hiking season got off to a great start when 19 members walked up Moore Cove for our Hardy Souls walk in late February. No plants were in bloom at that early date but 25 plants were identified including 4 "evergreen" ferns.

Our two March walks were also well received. Highlights of the Corn's Mill Shoals walk were the huge rock outcroppings, the abundance of mosses, lichens and Climbing Fern (*Lygodium palmatum*) and shedding our shoes to cross Toms Creek. The walk along Carrick Creek at Table Rock State Park was surprisingly rewarding botanically - 65 species were identified with 29 in bloom, among them a Pinxter Flower (*Rhododendron periclymenoides*).

In April, the weather was less cooperative and three walks were cancelled due to rain; another was cancelled so that members could attend the service for Bill Arbuckle.

Our usual trip to Pearson's Falls was a bit later this year but was just as rewarding. The uncommon Green Violet (*Hybanthus concolor*) was not yet in bloom but we were treated to fine displays of Canada Violets (*Viola canadensis*) and Giant Chickweed (*Stellaria pubera*). Walking Fern (*Asplenium rhizophyllum*) had spores and the Mountain Fragile Fern (*Cystopteris montana*) was abundant. Once again, Millie Pearson (and sister Odette) treated us to scrumptious goodies.

A light rain fell on the walkers who explored Glassy Mountain Preserve. This walk always presents a number of plants we encounter infrequently and also some familiar plants in abundance. New to the list this year is Wild Quinine (*Parthenium integrifolium*).

Once again Pacolet Falls treated us to vast displays of trillium: *Trillium catesbaei*, *T. cuneatum*, *T. erectum* and *T. grandiflorum*. Canada Violets added to the display. We were gladdened to learn that this private property is being put into a conservancy trust.

Our field trip to Graham County was an unqualified success. Twenty-seven members spent three days exploring three areas: 20 Mile Creek, Slickrock Creek and the Joyce Kilmer Memorial Forest. Special thanks to Bonnie Arbuckle for making the arrangements and leading the walks.

Shinn Garden is the place to go to see wonderful displays of Blue Star, Perfoliate Bellwort, *Trillium luteum*, Solomon's Seal, Solomon's Plume, Canada Violets, Green-and-Gold, Pink Shell Azalea and Yellow Mandarin. Unusual plants here are Pirate Bush (*Buckleya distichophylla*), Smaller Yellow Lady's Slipper (*Cypripedium calceolus v. parviflorum*) and Sand Myrtle (*Seiophyllum buxifolium*).

Ninety-five plants were identified on the Coleman Boundary road-side walk - 67 in bloom. Highlight of the walk was a flowering Wild Comfrey (*Cynoglossum virginianum*). Large numbers of Canada Violet, Yellow Mandarin (*Disporum lanuginosum*), Dwarf Larkspur (*Delphinium tricorne*), Wild Geranium (*Geranium maculatum*) and Stonecrop (*Sedum ternatum*) were blooming. The trail to Douglas Falls had been improved.



Plantago major

Common or greater plantain

Sometimes on our walks we fail to honor the presence of plantain and see it as a very common plant not worth mentioning. To bring to our awareness the medicinal power of this common weed, I would like to share my experience of plantain and add some embellishments from other people's experience.

Some of the common names show us that plantain has gotten a bad rap from the beginning: Devil's Shoestring, Englishman's Weed, White Man's Foot. Native Americans have been known to grumble that this plant grew wherever the White Man stepped. After all, plantain is not very particular where it grows.

As a first aid plant, it is the first thing I go for when I am stung by a bee. Just grab a small leaf, chew it a little, and press the fresh poultice on the inflamed area. Miraculously in moments the pain is relieved. Because of its complex chemistry this plant can draw out toxins as well as sooth irritation. I like to include plantain in my herbal skin salve due to its skin healing properties. Plantain is rich in minerals which is good for internal as well as external tissue healing. It may also be used for bleeding ulcers, gums, irritable bowel, bleeding piles, diverticulosis, burns and wounds that refuse to heal. These are all helped with this common, abundant weed.

Plantain is a soothing diuretic rich in potassium and anti-bacterial properties. Therefore it is effective for kidney and bladder conditions. A few drops of the fresh juice can ease the pain of ear infections.

The Native American tribes caught on to the healing powers of plantain and much is written regarding the uses they employed. Probably because of its astringent, anti-bacterial and lymphatic actions, the Iroquois used the fresh leaves to treat wounds as well as coughs, colds and bronchitis.

Let's not forget how tasty the fresh leaves are in salads. I liken the flavor to raw mushrooms and know I'm getting wonderful wild nutrients to keep my body strong and nourished. A little goes a long way, so eat only small amounts of this wild food.

Maybe now we know why plantain followed the steps of the White Man all over the world.

Peggy Ellis graduated from the California School of Herbal Studies in 1986. She and her husband, Craig, run the North Carolina School of Natural Healing with locations in Fletcher and Asheville. She cautions that herbal remedies must be taken with consideration of all health factors including the use of other medications.

Those Latin Names..... Betty Jones

Let's consider colors as they appear in Latin plant names. Remember that some word roots come from the Greek and have been "Latinized" in these plant names. It is interesting to me that so many of our tree names involve color.

<u>Color</u>	<u>Root</u>	<u>Lang</u>	<u>Examples</u>
red	rubr	L	<i>Acer rubrum</i> (Red Maple); <i>Quercus rubra</i> (Red Oak)
blue	c(a)erule	L	<i>Houstonia caerulea</i> (Bluets)
	cyan	G	<i>Centaurea cyanus</i> (Cornflower)
white	alb	L	<i>Prenanthes alba</i> (White Lettuce); <i>Quercus alba</i> (White Oak)
	leuco	G	<i>Leucothoe axillaris</i> (Dog Hobble)
yellow	flav	L	<i>Aesculus flava</i> (Yellow Buckeye)
	lute	L	<i>Trillium luteum</i> (Yellow Toadshade)
	xantho	G	<i>Xanthorhiza simplicissima</i> (Yellowroot)
green	virid	L	<i>Asclepias viridiflora</i> (Green Milkweed)
black	melan	G	<i>Sorbus melancarpa</i> (Black Chokeberry)
	nigr	L	<i>Brassica nigra</i> (Black Mustard)
			<i>Juglans nigra</i> (Black Walnut)
purple	phoenico	G	<i>Rubus phoenicolasius</i> (Wineberry)
	purpur	L	<i>Echinacea purpurea</i> (Purple Coneflower)
			<i>Houstonia purpurea</i> (Purple Bluets)
violet	viola	L	All of the <i>Viola</i> genus
scarlet	coccin	L	<i>Castilleja coccinea</i> (Indian Paint Brush)
			<i>Quercus coccinea</i> (Scarlet Oak)
bluish/ gray	caesi	L	<i>Solidago caesia</i> (Blue Stem Goldenrod)
gray	glauc	L	<i>Helianthus glaucophyllus</i> (Grayleaf Sunflower)
pale- yellow	ochro	G	<i>Spiranthes ochroleuca</i> (Nodding Ladies' Tresses) for its pale yellow flowers
reddish- orange	pyrrho	G	<i>Pyrrhopappus carolinianus</i> (False Dandelion) for the color of the pappus
tawny	fulva	L	<i>Hemerocallis fulva</i> (Orange Daylily)

You probably recognize these roots in non-plant names: (cyan)osis - a bluish discoloration of the skin; (leuco)cyte - white blood cell; (melan)oma - tumor containing dark pigment; (alb)ino - lacking pigmentation; (coc)hineal insect - used to make a red dye, etc. The artists among you will associate these roots with the colors of your favorite pigments.

On April 8, 2000 I visited the Camassia Slopes Preserve with several other members of The Nature Conservancy. Our leaders to this Nature Conservancy property were Merrill Lynch, Assistant Director of Protection for the North Carolina Chapter and Jeff Horton, the Roanoke River Project Coordinator.

The Preserve, only opened for supervised field trips, consists of 176 acres along the north bank of the Roanoke River in Northampton County, N.C. near Boones Crossroads. The area includes river floodplain, floodplain valley wall, and terrace slopes which rise steeply about 35 feet above the relatively flat floodplain. The slopes are notable for their unusual soil type which contains high percentages of calcium and magnesium. They are similar to the calcium rich sediments found along mid-western river banks and are completely unlike the acidic soils found along most other N.C. rivers.

The preserve has more than two dozen species of wildflowers designated as endangered, uncommon or rare in the coastal plain. There is no trail so we walked along the floodplain forest occasionally stumbling into shallow potholes that were completely covered by tangles of bedstraw. Another plant that was almost constantly underfoot was the False rue anemone, *Isopyrum biternatum*, or in R. Smith - *Enemion biternatum*. As the common name implies, it resembles the familiar Rue anemone, *Thalictrum thalictroides*, but is a slightly larger, more robust plant.

We eventually arrived at the slopes that were covered with several hundred of the plants for which the preserve is named, *Camassia scilloides*, Wild hyacinth. The racemes of pale blue flowers rise about 12-15 inches on leafless stalks above the grass-like basal leaves. Scattered amongst them were another of the preserve's rare flowers - *Trillium sessile*, Red trillium or Toadshade. It does not grow in the mountains but is very similar to our *Trillium cuneatum*, Little Sweet Betsy. Purple larkspur, *Delphinium tricorne*, was also abundant and Wild blue phlox. *Phlox divaricata*, not as prolific. The preserve is also noted for its many Three birds orchids, *Triphora trianthophora*, but these do not bloom until late summer. The trees are mostly sugar hackberry, *Celtis laevigata*, which was new to me, and ash, sweet gum and sugar maple.

We were fortunate weatherwise. The floodplain was dry (sometimes waterproof boots are needed), the sky was blue and the temperature was comfortable. However on the way back to my campsite at Kerr Reservoir (about 1 1/2 hours west of the preserve), the heavens opened up and gale force winds blew. Instead of spending a quiet evening sitting by the lake, I sat reading in my camper wondering if a tornado was on its way. Sunday morning dawned clear and when I stopped for gas I learned that strong winds had damaged homes in a village about 20 miles away.

GATHERERS

In an alpine meadow near Pikes Peak
the three of us hunt wildflowers.
We gather blooms as words in a
 notebook,
travel through Audubon's guide as
wind fingers pages.
Indian paintbrush and pearly everlasting
 Castilleja miniata and Anaphalis
 margaritacea
Stooping, we catch leaves and flowerheads
delicate
to count
to examine
to compare
with pictures, with words--
watch feet for shafts of color like gems in
 lode—
blue columbine
 white locoweed
 orange hawkweed
 purple cranes bill

"Come see, we've found bergamot!"
"I can't.
I've found pussytoes.
I'll lose them if I leave this spot.
One of you come here."
"Mark your place with a stick,"

We savor names on our tongues--
 wild strawberry ... *Fragaria glauca* ...
 shrubby cinquefoil ... *Potentilla*
 fruiticosa
capture plant people with cameras
record their census.

Periwinkle butterflies bounce from
 woolly yarrow to nootka rose.
We are dizzy with plenty
 share eyes and footsteps
 track from book to book
 hope for what we haven't seen ...
for
 shooting stars
for
 prairie smoke.

One reads, another examines, our third
 consults.
"That's it!"
Welling-up of hunger satisfied.

-Caroline R. Goforth
 Summer 1996



Aquilegia caerulea
Blue or Colorado
columbine

Caroline Goforth, the author of "Gatherers" was an active member of the South Carolina Native Plant Society and a teacher, writer and lover of nature. "Gatherers" was written during a trip across the country to the southwest. She died about a year later of cancer at age 50.

Her husband, Tom Goforth, Editor of the Newsletter of the South Carolina Native Plant Society, granted permission for us to reprint the poem from the fall 1999 issue. Tom described his wife as a "tenacious searcher".

SHORTIA

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Summer 2000

A quarterly publication of the Western Carolina Botanical Club

Editor: Anne Ulinski
Editorial Assisting and Art Work: Pat Arnett

Distribution: Ruth Hoerich

Please submit contributions for the next issue by August 10, 2000 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 \$12. New members joining from the period July 1-December 31, pay \$6. All memberships are renewable on January first of each year. Please send dues to:

Rachel Conway, Treasurer 211 Aldersgate Circle Asheville, N.C. 28803
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c/o Ruth Hoerich
215 Newport Road
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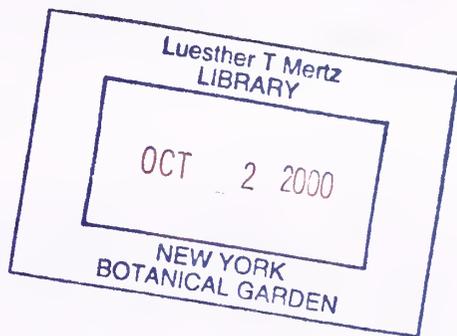
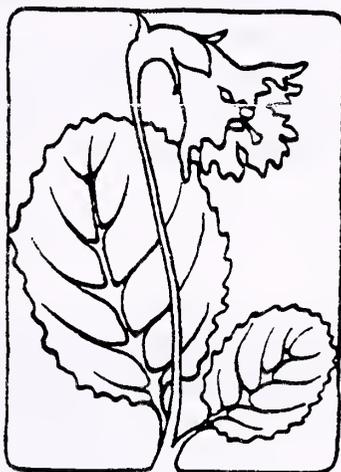
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SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
AUTUMN 2000



Shortia galacifolia

Oconee Bells

5

RECORDER RAMBLINGSBetty Jones

Our Year 2000 season continues with an increase in average attendance: over 18 per walk.

The walk up Pilot Mountain was scheduled to coincide with the blooming of the Pink Shell Azalea (*Rhododendron vaseyi*) and that it did - in abundance. Bluets (*Houstonia serpyllifolia*) and Rose Twisted Stalk (*Streptopus roseus*) also graced the path.

Twenty people joined leader Elisabeth Feil on her climb up the stairs at Chimney Rock. In addition to the spectacular views, the group saw two very special plants: Spreading Rockcress (*Arabis patens*) - rare in NC; and White Irisette (*Sisyrinchium dichotomum*) - on the Federally Endangered List.

I was pleased to welcome 28 guests to my place for a walk in our mountain cove. We saw Ginseng (*Panax quinquefolius*), the Kidney-leaved Twayblade (*Listera smallii*) and a mystery plant which later proved to be the Ragged Fringed Orchid (*Platanthera lacera*). Thirteen species of ferns were identified. About half of the group walked further up the cove to view one of our small waterfalls.

It was a cold walk up the Graybeard trail in May, but well worth the discomfort. As in May of last year, there were **mass** displays of Solomon's Plume (*Smilacina racemosa*), Bluebead Lily (*Clintonia borealis*), Canada Mayflower (*Maianthemum canadense*) and Wake Robin (*Trillium erectum*). This is a very special trail.

It was an easy and pleasant walk along the roads of Cold Mountain. Happy Fishback saved us a lot of effort by bringing several of the rare Starflower (*Trientalis borealis*) plants down from the top of the mountain. (Don't be concerned: they were being donated to a botanical garden.)

Highlight of the Kanuga walk was the Sweet Pitcher Plant (*Sarracenia jonesii*) in full bloom. This is an endangered plant.

Twenty-five of us ambled down Wolf Branch Road at the North Carolina Arboretum. Most prominent among the 76 plants identified were Thimbleweed (*Anemone virginiana*) and New Jersey Tea (*Ceanothus americanus*).

Peggy Ellis introduced us to the many plants in her medicinal garden. We were glad to take shelter in Peggy's new educational facility when a light rain began to fall. The pot-luck food was great as usual; I thought the desserts were exceptional.

The list of plants for Graybeard in June was quite different from that of May. Three plants stood out on this June walk: Gray's Lily (*Lilium grayi*), Large Purple Fringed Orchid (*Platanthera grandiflora*) and Michaux's Saxifrage (*Saxifraga michauxii*) which was abundant along the path.

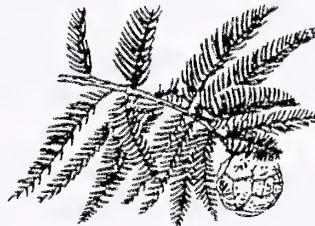
A monocular was required to see the endangered Climbing Fumitory (*Adlumia fungosa*) on the Laurel River Gorge walk - a single plant high on the rocky face. Much easier to admire on this easy walk were the rare *Stachys nuttallii* and *Potentilla norvegica*.

Do you ever become discouraged and give up the search when trying to identify an unfamiliar plant? Take heart, you are not alone. Most of us at some time or other, do just that. Keys, as we know, are the best approach to plant identification if we are able to master them and have the time and patience to use them. You folks with orderly minds and infinite patience are quite expert at "running down your plants". But I have to admit I belong to the "match the pictures" group, as my mind is not so orderly and I become frustrated with the many and often bewildering terms used.

Do you know there are more than 60 ways to say that a plant is not smooth, that it is rough, is bristly, has fuzz, hairs or prickles? Most of these terms mean different or slightly different things, but my brain just doesn't retain all this data. My ginkgo biloba will sometimes "kick in", but 60 terms? What do I expect one little pill to do, for goodness sake? I think I will just say "prickly", it suits me better than "echinate" or "aculeate."

oo oo

South Carolina Swamp Trip



Taxodium distichum
Bald Cypress

Plans are going forward for the October 23-24 trip to two South Carolina swamps -Congaree Swamp National Monument and the National Audubon Sanctuary Francis Beidler Forest. There will be a guided tour at both sites, each lasting from 2-3 hours. There will be a \$5 fee at the Beidler Forest. Bring binoculars if you have them. For information on making a room reservation in St. George, S.C. for the night of October 23, and to reserve a place on the trip, call Larry Ballard at 891-4318.
Reminder: Members are responsible for making their own reservations.

oo oo

Botany Bookmarks



The Francis Beidler Forest in Four Holes Swamp: <www.pride-net.com/swamp>
You will find at this site: History, Hurricane Legacy, Upcoming Events, Plant Lists and much more. Look for pictures of Green Fly Orchid, Yellow Jessamine and Carolina Trillium.

THOSE LATIN NAMES Betty Jones

By now, most of you have probably noticed that many of our plant names contain a geographical area or place designation. It is likely that these names indicate the location where the plant was first found and given its Latin name. At this time, I have over 1500 plant names in my WCBC database - 1200 from Dick Smith's book, plus an additional 300 taken from club plant lists. In the list below, under #, I have shown the number of times this location is found in our plant name database.

<u>PLACE</u>	<u>#</u>	<u>EXAMPLES</u>
Virginia	52	<i>Claytonia virginica</i> (Spring Beauty); <i>Fragaria virginiana</i> (Wild Strawberry); <i>Silene virginica</i> (Fire Pink)
Canada	40	<i>Viola canadensis</i> (Canada Violet); <i>Sanguinaria canadensis</i> (Bloodroot); <i>Aquilegia canadensis</i> (Columbine)
Carolina	26	<i>Claytonia caroliniana</i> (Spring Beauty); <i>Halesia carolina</i> (Carolina Silverbell); <i>Tsuga caroliniana</i> (Carolina Hemlock)
America	25	<i>Conopholis americana</i> (Squaw Root); <i>Euonymus americanus</i> (Hearts-a-Bustin')
of the Mountains	11	<i>Oxalis montana</i> (Common Wood Sorrel); <i>Pycnanthemum montanum</i> (Mountain Mint)
Pennsylvania	7	<i>Acer pensylvanicum</i> (Striped Maple); <i>Prunus pensylvanica</i> (Pin Cherry); <i>Polygonum pensylvanicum</i> (Pink Smartweed)
Maryland	6	<i>Sanicula Marilandica</i> (Black Snakeroot)
of the South	4	<i>Baptisia australis</i> (Blue False Indigo)
of the North	3	<i>Clintonia borealis</i> (Bluebead Lily); <i>Trientalis borealis</i> (Star Flower) as seen at the Fishback place.

What place do you associate with these plant names: *Salix babylonica* (yes, it's Babylonia), *Minuartia groenlandica*, *Rhododendron catawba* (as in Catawba River of the Carolinas), *Oxalis europaea*, *Duchesnea indica* (the East Indies), *Argemone mexicana*, *Veronica persica* (Persia), *Engeron philadelphicus*, *Asclepias syriaca* (Syria), *Belamcanda chinensis* (China), *Ligustrum sinense* (also China), *Hieracium florentinum*, *Sisyrinchium atlanticum* and *Lonicera japonica*?

These are not so obvious: *Circaea alpina* (above the tree line), *Impatiens capensis* (Cape of Good Hope), *Verbesina occidentalis* (of the western world), *Polygonum orientale* (of the eastern world), *Galium pedemontanum* (of the Italian piedmont), *Aster novae-angliae* (of New England), *Vernonia noveboracensis* (of New York) and *Aster tataricus* (of the Tatar area of Central Asia).

Wood nettle, *Laportea canadensis*, is the stinging nettle we are most likely to see on field trips in western North Carolina. It was identified on both the June 23 and July 29 visits to the Graybeard Mt. - Glassy Minefalls trail, both times in bloom.



Laportea canadensis
Wood Nettle

Wood nettle is a member of the nettle family, Urticaceae. ("Uro" is Latin for burn). The plant is described as monoecious, with both flowers unisexual and the staminate (male) and pistillate (female) flowers on the same plant. For those of you interested in the origins of some of our botanical terms, "ecious" means household, so monoecious means one household, or both male and female flowers on the same plant compared to dioecious which is two households --male and female flowers on different plants.

Wood nettle has five-parted flowers and is the only stinging nettle with alternate leaves. The flowers are small, greenish and hang in loose, branching clusters, either from the top of the plant or in the axils. The stinging hairs are said to be able to penetrate light - weight or loosely woven fabrics so watch out for this plant. One article I read said the stinging lasts less than 10 minutes, so, it says, "...it's hardly worth while to look around for a plantain, crushing it and squeezing its juice on the inflamed skin."

Wood nettle should not be confused with another member of the nettle family, False nettle, *Boehmeria cylindrica*, which has alternate leaves but no stinging hairs. Then there are two species of the genus *Urtica* which have stinging hairs but opposite leaves.



<<<<< *Urtica dioica*, Great stinging nettle, densely covered with stinging hairs, its flowers dioecious, is an import from Europe and fortunately uncommon in N.C.

Urtica gracilis, American stinging nettle, native to >>>>>>> North America, its flowers monoecious, is usually found growing on limestone. It is listed by the N.C. Heritage Program as new to North Carolina.*



*Weakley's "Flora of the Carolinas and Virginia, Working Draft of May 4, 1998", divides the two *Urtica* species on the basis of plant structure, chromosome number, breeding and distribution. Other floras may show *U. gracilis* as a sub-species.

On the Curious Monikers of Wildflowers.....

.....Tim Takaro

If you like the sound of words, you'll savor the names wildflowers bear. In addition to the ordinary labels of common flowers such as golden-rod and skunk cabbage, there are quite a few oddball appellations that are more than just curious - they can even be weird. Where do they come from?

Many are popular names whose origins are lost in antiquity, but many must have been named for what the flower, or a part of it, resembled to someone's overactive imagination: Adder's tongue comes to mind and Dragonhead, Ghost Pipes and Skullcap, Beggar's-lice, Cup Plant, Buttonbush - clearly descriptive names. On the other hand, some seem to be prescriptive - calling perhaps for a doctor's prescription, like Agueweed, Feverweed, Colicroot, Heal-all, and Indian-physick. Pleurisy Root and Wild Quinine belong here, too.

Some flowers are named for their edibility, especially the herbs: Aniseroot, Caraway, Horseradish, Licorice, Marjoram, Peppermint and Spicebush. Berry names are legend, from Baked-apple Berry to Winterberry, with representatives from nearly every letter of the alphabet in between, including such exotics as Deerberry, Nannyberry, and the pretty Partridgeberry. (Incidentally they're not all edible.) Also striking are the references to food, such as Orange Grass, Milkweed, Butter-and-eggs, Corn Salad, Indian Cucumber Root, Mountain Lettuce, Lamb's-quarter.

Animals, birds and insects have loaned their names to lots of flowers. There are Beetleweed and Cat's-ear, Coltsfoot and Cranesbill, Goatsbeard and Goosefoot. We have Lizard's Tail and Monkey Flowers, Mouse-ears and Mooseberries, Pigweed and Ragged Robin, Rattlesnake Plantain and Scorpion Weed. Sow Thistle and Squirrel Corn fall into this category as well. So do Storksbill, Trout Lily, Toad Shade, Turkeybeard and Turtle-head. Then there's Cuckooflower and many others.

Some wildflowers take their names from their roots rather than their blossoms. Blood-root, Alum Root, Culver's Root, Bowman's-root occur to me.

Some of my favorites are called "wort", an ancient if unattractive generic word for root or plant or weed. There are any number of them: Bellwort, Butterwort, Honewort, Lungwort, Miterwort, Moneywort, Motherwort, Mugwort, Nipplewort, Pennywort, Pipewort, Saltwort, Sandwort, Spearwort, Swallow-wort and Thoroughwort.

There are flowers with mythological associations: Grass-of-Parnassus, Calypso, Three-seeded Mercury, Venus'-looking-glass. Religious references abound, such as Jerusalem Oak, and Jerusalem Artichoke, Bishop's Cap, Burning Bush, Cardinal Flower, Devil's-bit and Devil's Paintbrush, Live-forever, Quaker-ladies, Jacob's Ladder, and Jack-in-the-Pulpit. How do you like Clammy Everlasting or Wafer Ash? Names with a more sinister turn - Carrion Flower, Corpse Plant, Dead Nettles, Green Dragon, Mandrake, Deadly Nightshade and Mad-dog Weed - are mercifully offset by the Saints: St. Andrew's-cross, St. John's-wort, St. Peter's-wort and Star-of-Bethlehem.

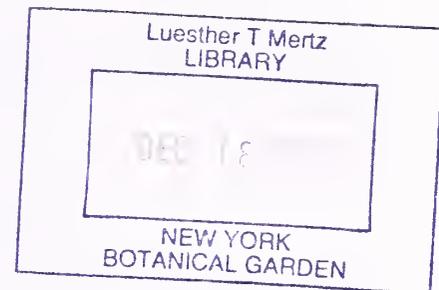
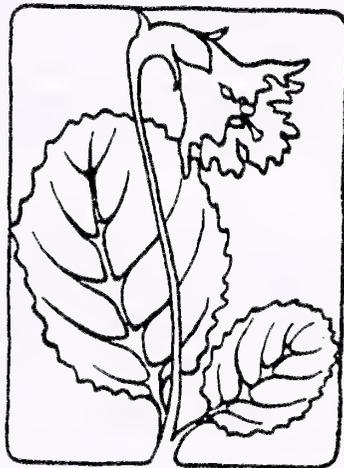
Our indigenous forebears are well represented in wildflower names as witness Indian-Cup, Indian Paintbrush, Indian Pipe, Indian Plantain, Indian Poke, Indian Tobacco and Indian Turnip. The hyphenated names have always fascinated me. We all recognize Lily-of-the-valley but how many have heard of Flower-of-an-hour or Gall-of--the-earth or Gill-over-the-ground or Harbinger-of-spring or Queen-of-the-prairie?

And then there is love. Ah, love, You can reconstruct the whole human romantic catastrophe from beginning to end just using the names of wildflowers. We begin of course with Adam and Eve and proceed to Innocence and Virgin's Bower and Pale Touch-me-not. Then we move on to Snake-mouth and Mayapple followed by Doll's-eyes, Black-eyed Susan, Blue-eyed Mary, Ladies-tresses, Blue Curfs, Lady's Slippers, Sweet Cicely, and Bouncing Bet. Then inevitably there are Passionflower and Wild Oats, followed by Bastard Toadflax, Bleeding Heart, and Rue. Finally we come to Heart's-a'bustin and Forget-me-not.

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SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
WINTER 2000



Shortia galacifolia

Oconee Bells

WESTERN CAROLINA BOTANICAL CLUB - 2000

President: Anne Ulinski
Vice President: Bonnie Arbuckle
Secretary: Peggy Ellis

Treasurer: Rachel Conway
Recorder: Betty Jones
Historian: Dana Herrman

From the President.....Anne Ulinski

“The Little Things That Run The World” reads the message from the Xerces Society* on the back cover of the Fall issue of the publication Wild Earth. “Insects and other invertebrates are at the heart of a healthy world, vital to life as we know it....These diverse and wonderful creatures -- beetles, bees, ants, dragonflies, butterflies, spiders, worms, snails, lobsters, starfish and sea urchins --to name a few -- provide services like pollination and decomposition, or simply become food for other creatures....Without them the world would be impoverished and ecosystems would collapse.”

Bert Hölldobler and Edward O. Wilson in Journey to the Ants tell us : “If all of humanity were to disappear, the remainder of life would spring back and flourish....If all the ants disappeared, the effect would be exactly the opposite, and catastrophic.”

As we go on the field trips with the Botanical Club it is useful to look around often to determine the habitats and ecosystems through which we walk. One of our long time members, Elton Hansens, a professional entomologist, would also remind us to look at “the little things” -- such as leaf miners, spittle bugs, galls and beetles. Elton doesn't often come on our field trips now so we need to remember his message and realize we would not be listing any of those flora in bloom without the pollinators, seed carriers and other invertebrates. It's another level of observation and reminds us of the complexity and interrelatedness of our natural world.

Listening is another level of awareness. Those who went on the South Carolina Swamps Trip will remember those special moments of silence we enjoyed together at Weston Lake in the Congaree Swamp and again at the lake along the Beidler Forest boardwalk. This fall, one of our members, Larason Lambert, shared the following words with us as we began the silent walk on the woods road to Corn's Mill Shoals:

The wildwood is an enchanted realm, and those who would its
wonders see must first obey its commands.
The first of these is silence,
for only to the noiseless is its magic revealed.**

oo oo oo oo oo oo oo oo oo oo

*The Xerces Society was established 30 years ago to inform the public of the benefit of invertebrates. It is a membership organization with headquarters in Portland, Oregon.

** From Wildwood Wisdom by Ellsworth Jaeger

Getting to Know You.....Lois McDaniel

Barbara D. Allen 17 Indian Lake Rd. Lake Toxaway, N.C. 28747
Winter: Esquisite Gardens, 5 River Court Pkwy NW, Atlanta, GA 30328

Larry and Anita G. Avery: 4 Windrush Lane, Flat Rock, NC 28731. Tel: 692-1866l. Larry and Anita moved here seven years ago. Larry's work was in the computer industry. He is interested in plant, tree and bush identification and he gardens with native plants.



Cecilia Ruth Bockoven, born October 19, 2000 to WCBC members Beth and Paul Bockoven.

Thomas and Jane Davis: 143 Inkberry Road, Hendersonville, NC 28739. Thomas and Jane moved from Tennessee to Laurel Park this August. They are interested in hiking and gardening with native plants.

Betty Dziedzic: 601 Toxaway Views, Lake Toxaway, N.C. 28747. Betty lives in Florida in the winter.

Jackie and Robert Fitts: 424 Winchester Creek Rd., Waynesville, NC 28786. They live in Sandy Springs, Ga. in the winter. Jackie is interested in identifying native plants in her new Waynesville home. She became a master gardener in Atlanta.

MEMBERSHIP RENEWALS

All memberships are renewable on January 1, 2001. We don't have the resources to mail each one of you a renewal reminder so please bring you dues to our Annual Meeting (Friday, January 12) or mail them to our Treasurer, Rachel Conway. Her address is: 211 Aldersgate Circle, Asheville, N.C. 28803. Dues are \$12 a year.

SITE OF THE INDOOR MEETINGS IS CHANGED

Beginning with our first indoor meeting on January 5, 2001, our new meeting place will be the Bullington Horticultural Learning Center, 140 Zeb Corn Road, Hendersonville. All other indoor meetings will be held there --except the Annual Meeting which will be held as usual at St. John's-in-the-Wilderness, Flat Rock.

Directions to Bullington Center: From the west: take Route 64 East through Hendersonville, cross I-26 and watch for Howard Gap Road. Turn left on Howard Gap Road (Ingles on right side). Drive 1 mile, turn right on Zeb Corn Rd, go .6 mile and turn right at Bullington Center sign & drive up gravel road to entrance on left.

From the north, After the junction of Howard Gap Rd. and Brookside Camp Road. continue south on Howard Gap Rd. for 2.4 miles, turn left on Zeb Corn Rd., then go .6 miles to Bullington sign and turn right to gravel road and Bullington entrance.

Visitors to the GAIA HERBS facility in early July were once again treated to a splendid display of Purple Coneflower and Feverfew. Passion Flower was being harvested.

One of the club's favorite botanizing spots - Bee Tree Gap - attracted 27 members for an easy mid-July walk. Special favorites were Tall Bellflower (*Campanula americana*), Basil Balm and Bee Balm (*Monarda clinopodia* and *M. didyma*) and Fire Pink (*Silene virginica*). Though the area covered was small, 61 blooming species were identified.

The botanically rich Shut-In Trail did not disappoint us. Though we were a week or more early for the best displays of Turk's Cap Lilies, Leather Flower, Starry Campion and Black Cohosh, the sheer number of different species - nearly 100 - was impressive in itself.

Two of the four monthly Graybeard walks on the summer/fall schedule were cancelled due to weather. But since scouting reports were submitted for the cancelled walks, we now have monthly data for April through October. It is generally agreed that the spring walks are the most exciting here, but good botanizing continues through September.

Plants that prefer dry open areas are the usual fare on Pinnacle Mountain / Sky Valley Road and this year was no exception. Wild Quinine (*Parthenium integrifolium*) and Grass-leaved Golden Aster (*Pityopsis graminifolia*) were abundant. Small patches of Fameflower (*Talinum teretifolium*) were still in bloom.

The Frying Pan Gap walk yielded the highest plant count for the season, largely due to the diverse habitats visited. On the way to the tower, the group examined the seldom-seen Intermediate Dogbane (*Apocynum medium*).

Thanks to Mary Helen Harris for sharing with us the flowers of Cut Off Mountain. And thanks too for her hospitality and great "eats".

The recorder for the Blue Ridge Parkway South stop-and-go outing listed these plants as noteworthy: Purple Giant Hyssop (*Agastache scrophulariaefolia*), Alumroot (*Heuchera villosa*), Closed Gentian (*Gentiana clausa*), Turtleheads (*Chelone obliqua* and *C. lyonii*), Grass-of-Parnassus (*Parnassia asarifolia*) and Sundews (*Drosera rotundifolia*).

We had our first look at fall flowers on the Jackson Park walk in mid-September. *Murdannia* (*Murdannia keisak*) was identified. The only other place we have found this plant is at Lake Issaqueena in South Carolina.

Our walk along the South Mills River (new for the club) in late September yielded a surprising number of plants. We may want to try this again earlier in the year.

At our annual fall picnic at Herrman's Ramblewood we enjoyed a botanical scavenger hunt and a Latin Plant Names game - prepared by Millie Blaha and Dana Herrman. Co-winners of the scavenger hunt shared the candy bar prize. After our potluck lunch, we rambled in Ramblewood.

Mistletoe is not really a plant as we know it but is a parasite of trees. Once established it gets its nutrients from the host by stealing precious juices as it sets its roots deep into the bark of the tree. American mistletoe has the botanical name of *Phoradendron serotinum*.* The Greek "phor" means thief and "dendron" means tree.

Mistletoe has a beautiful white berry poisonous to humans but which birds love to eat. Once eaten, the inner seed of the berry passes through the digestive tract and comes out so sticky that the bird has to rub its bottom on the tree branch to get the seed off! This firmly adheres the seed to the branch where it grows sending out roots in just a few days. Mistletoe blooms midspring to early summer and can grow as tall as 1-2 feet high.



This parasitic plant plays a role in many legends involving mystery and intrigue. What was the origin of the practice of kissing the person who stands under the mistletoe? A Scandinavian legend tells of Balter, God of Peace, who was slain by an arrow made of mistletoe. The other Goddesses and Gods were quite upset and asked that Balter's life be restored. When he returned to life, the power of mistletoe was given to the Goddess of Love who decreed that anyone passing under the mistletoe is kissed as a symbol of love. We continue this ancient tradition at Winter Solstice just as the Celtic druids welcomed in New Year with branches of mistletoe.

Not being a tree climber, I depend on others to harvest this elusive plant which has been shown to have valuable medicinal properties. It shows great promise as an anti-tumor remedy, having been used by some 30,000 people in Europe as a product called Iscador. This product has not yet been accepted by oncologists indicating a need to bridge the gap between effective non-toxic herbal remedies and the more costly modern medical treatments.

One cannot help but notice the correlation between the legend of this plant governed by the Goddess of Love and its use as a heart tonic. It calms the nerves, is hypotensive and is a cardiac depressant. The European species, *Viscum alba*, has been studied and taken under supervision more frequently in Europe than here. David Hoffman in his book, The Holistic Herbal, suggests the extract form is helpful in reducing heart rate and in strengthening the wall of the peripheral capillaries.

We tend to think of mistletoe as a festive addition to holiday parties inviting surreptitious kisses under its branches. This season let us also remember its basis in ancient tradition and value its herbal properties. It indeed bridges the gap between our physical and emotional hearts. Blessed be.

WCBC board member, Peggy Ellis, is a Certified Herbalist who lectures and privately consults on the physical, energetic and spiritual properties of herb and plant substances.

*Listed as *Phoradendron leucarpon* in Flora of the Carolinas and Virginia, Working Draft, May 4, 1998 by A.S. Weakley

When I started working on our club plant lists a couple of years ago, I noticed that *Achillea millefolium* (Yarrow) appeared first on many of the lists. I wondered whether the *Achillea* genus name was a reference to the Greek hero Achilles and whether other plant names had mythological references. The answer to both questions is yes. Here are a few examples, all appearing as a genus name:

Achillia (Yarrow) - Yarrow was once used to staunch the flow of blood. According to legend, Achilles carried the plant to treat wounded soldiers during the Trojan Wars.

Aconitum (Monkshood) - Name is from the hill Aconitus on which Hercules was thought to have fought with Cerberus, the multi-headed dog of the underworld. Legend says that wherever the foam from Cerberus' mouth landed, the poisonous Monkshood grew.

Anemone (Windflower) - One legend says that the name is from the Greek god of the winds, Anemos, and these flowers heralded his coming in the spring. Another derivation is from "Naamen" which is Persian for Adonis. Legend says that anemones grew where Aphrodite's tears fell to the ground when Adonis died in her arms.

Asclepias (Milkweed) - From the Greek god of medicine, whose Latin name is Aesculapius. Milkweeds were once used extensively as a healing herb.

Circaea (Enchanter's Nightshade) - Named for the sorceress Circe who, legend says, used a poisonous member of this genus to change Odysseus' companions into swine.

Gentiana (Gentian) - One legend say the gentians were named for Gentius, king of Illyria (an ancient country located on the Adriatic sea) who was well known for using gentians for medicine.

Iris (Iris) - Because of the many colors of the flower, the Greeks named them for their goddess of the rainbow, Iris. She used her rainbow as a bridge linking earth to other worlds.

Lysimachia (Loosestrife) - Named for King Lysimachus, companion and successor to Alexander the Great. Lysimachus means "causing strife to cease", hence, the common name. A sprig of Loosestrife was tied between yoked animals to prevent them from fighting.

Silene (Pink, Catchfly) - One legend says that the name is derived from Silenus who was the foster father of Bacchus. Silenus was often found intoxicated with beer all over his face. This foam resembled the secretions of the Catchflies and so Silenus' name was attached to the plant.

Zephyranthes (Atamasco or Zephyr Lily) - Literally, means "flower of the northwest wind". In Greek mythology, Zephyrus was the west wind and his wife, Chloris, was goddess of flowers.

Note: Much of this material came from Wildflower Folklore by Laura C. Martin.

Here and there, on rocky outcrops or nestled against the edge of a large blueberry patch, a scraggly low bush catches our eyes with its unusual yellow blossoms of four petals that are arranged in a flat "X". It is a St. Andrew's Cross. But which one: *Hypericum hypericoides* or *H. stragalum*? (Actually, the latter does not have a common name.)

The petals are deceptively similar in appearance. The flowers have 2 styles; the four yellow petals are narrowly oblong-elliptic, 8-11 mm long; the leaves 1-3 cm long and 1.5-6 mm wide. There are subtle differences in the leaves, however. In *H. hypericoides* they are variable in shape, mostly linear-elliptic and broadest and widest above the middle. In *H. stragalum* they are more uniform in size and shape, oblanceolate and widest above the middle.

The best way to differentiate the two species is to look at the growth form and pattern. *H. hypericoides* is an erect shrub, 1 m or more tall. Generally it has a single stem that is freely branched well above the ground. In contrast, *H. stragalum* is a decumbent shrub, seldom more than 30 cm tall. There are many decumbent branches close to the ground with many erect branchlets, giving a matted appearance.

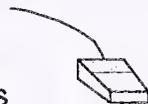
Another hint at the species is the distribution: Both species are common plants in N.C. but *H. hypericoides* is uncommon in the mountains, whereas *H. stragalum* is uncommon in the coastal plain.

So--the matted plants we find in our area are probably *H. stragalum*. Now all we have to do is invent a common name for them.

[Sorry, we have no illustrations for these two plants since none of the drawings show the most useful identifying criteria -the growth pattern -Editor]

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Botany Bookmarks



The Xerces Society. <www.xerces.org>

This site has some wonderful pictures of insects as well as information on the Society's projects, membership, publications and resources. Available books have such tantalizing titles as: Spineless Wonders, Conversations with Bugs, and for kids: Spiders Spin Webs. For a purchase of the note cards, Rainforest Invertebrates, the Society donates a percentage to the Children's Eternal Forest Project, an international effort by children to save from destruction a 43,000 acre rainforest in Costa Rica.

NATIVE ORCHIDS OF THE SOUTHERN APPALACHIAN MOUNTAINS

by Stanley L. Bentley*

This is a book that should energize the WNC Botanical Club to get out there and look for those "rare" orchids which the author so obligingly points out are right at our doorstep.

Based on the author's many years of nature study, this guidebook highlights 52 species found in western N.C. and Virginia and eastern Tennessee, Kentucky and West Virginia. Blooming from April to November, these native orchids range in size from the large Kentucky Lady's slipper to the tiny green adder's mouth and in rarity from the hard-to-find Bentley's coralroot (named after the author) to the commonly found downy rattlesnake plantain.

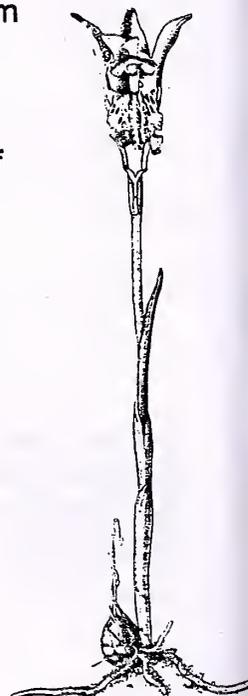
The entry for each orchid includes the plant's scientific and common names, a description of the flower (including color, shape and size), and information on the time of flowering, range and typical habitat, all in the context of the southern mountains. A range map depicts counties wherein each species may be found. And absolutely marvelous photographs of each orchid- some closeup and some in habitat -make this an outstanding guide-book.

I especially liked the table on flowering periods because it is next to impossible to find some of the orchids unless they are in bloom, and this table could be a great help. It gave me a "rush" to read the section "Down the Blue Ridge" under the heading Special Orchid Places in the Southern Appalachians, because the Club schedules so many walks there. And I would like to quote directly from the book the following as an inspiration to the Club in their planning for future explorations:

"From their natural geographic placement, some special locales just seem to be havens for especially rare orchid species. In southwestern North Carolina, the prize goes to Henderson County. It is one of only three counties in NC where the exceptionally rare small whorled pogonia has been recorded and one of only three counties where collections of the bog rose have been made. It is the site of NC's only mountain location for the white fringed orchid and the crested fringed orchid."

It is my opinion that any Botany Club member would be VERY pleased to receive this book as a gift on any occasion at any time of the year but preferably before April when the orchids season starts.

Bog-rose
(*Arethusa bulbosa*)



* University of North Carolina Press.
Price: Cloth \$39.95; Paperback \$24.95

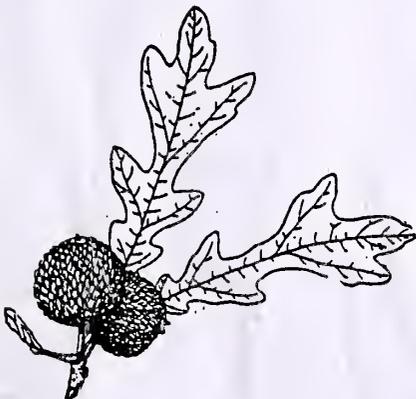
A 6500 foot boardwalk, ancient towering Bald Cypress trees (*Taxodium distichum*) with their strange "knees", epiphytes hanging from the branches of tupelo trees, strange acorns and seeds underfoot to be picked up and examined, dwarf palmetto (*Sabal minor*) on the ground and Cross Vine (*Arisostichus capreolata*) and Trumpet Vine (*Campsis radicans*) climbing on nearby trees. This is some of what a group of eleven members of the Botany Club saw when we visited Beidler Forest on October 24.

After we parked our cars and before we even reached the Visitor's Center to report for our guided tour, one of our members headed for a small plant at the base of a tree. It was an orchid and in bloom. This was Shadow-witch (*Ponthieva racemosa*), a fall blooming orchid which is listed as rare in the state of South Carolina, and significantly rare in North Carolina. Ann Shahid, the guide for our tour, assured me later the orchid had not been moved there for the benefit of eager botanists like us. "No", she said, "We don't move anything here."



Beidler Forest, a National Audubon Sanctuary, is the largest remaining virgin or old growth swamp forest in the world. Its 3500 acres lie in the heart of Four Holes Swamp, a narrow swamp-stream system fed by springs and rainfall. Francis Beidler, a lumberman and early conservationist, bought this property in the early 1890's and left it largely undisturbed. After his death in 1924, local conservationists were able to protect the property until 1970 when The Nature Conservancy and the National Audubon Society jointly purchased the land for a preserve subsequently named for Francis Beidler. The National Audubon Society manages the Swamp in accordance with its mandate: "The preservation of the ecosystem and of the native plant and animal life in perpetuity".

We identified two epiphytes: one with waxy green leaves about three inches long was Green-fly Orchid, (*Epidendrum conopeseum*), the only epiphytic orchid growing in South Carolina. (An epiphyte is a plant that grows on another plant but is not parasitic. It gets its nourishment from the air). The other epiphyte was more familiar -- Resurrection Fern (*Polypodium polypodioides*).



An unusual acorn was picked up and passed around. It came from a nearby oak tree, *Quercus lyrata*. Its rough acorn cup is unique, enclosing almost completely the globular nut; only the very tip is visible. Aptly the common name is Overcup Oak.

Another trip to Beidler Forest is being planned in the spring of 2001. Watch the next schedule for details.

Overcup Oak

SHORTIA

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Editor: Anne Ulinski
Editorial Assisting and Art Work: Pat Arnett

Distribution: Ruth Hoerich

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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 \$12. New members joining from the period July 1-December 31, pay \$6. All memberships are renewable on January first of each year. Please send dues to:



Rachel Conway, Treasurer
211 Aldersgate Circle
Asheville, N.C. 28803

SHORTIA
c/o Anne Ulinski
1212 Chanteloupe Drive
Hendersonville, N.C. 28739



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