

SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
SUMMER 1999



Chelone lyonii

Pink Turtlehead

WESTERN CAROLINA BOTANICAL CLUB - 1999

President:	Anne Ulinski	Treasurer:	Rachel Conway
Vice President:	Bonnie Arbuckle	Recorder:	Betty Jones
Secretary:	Peggy Ellis	Historian:	Anne Matthes

From the President.....Anne Ulinski

Sometimes if we are lucky, a gifted person comes into our lives, one willing to share his knowledge with others. Dick Smith was such a person. In his quiet way he challenged us to open our eyes, stretch our minds, sharpen our senses. With him we looked up mountain ridges to see the unusual Appalachian St. John's-wort and the rare Canada burnet. We looked down to see the tiny Round-leaved sundew and the elusive Pennywort. With infinite care he showed us the disk and ray flowers of the composites and the sessile central floret of the Golden Alexander. Each year he reminded us to use our hands lens to examine the unique structure of Flowering spurge. Dick, often with his wife Jeanne, took us to Lake Issaqueena, Station Cove, Frying Pan Gap and to the rock faces on the Blue Ridge Parkway. We learned from him the disciplines required of a good botanist: Careful observation (Look Again!), the use of keys and reference materials and the accurate recording of our field notes.

For almost 20 years until his death last month, Dick gave generously of his time and knowledge to enrich those of us in the Botanical Club. We are grateful for all that he shared with us.

This issue of Shortia is dedicated to him.

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For more on the life and accomplishments of Dick Smith, see the article by long-time friend and colleague, Elton Hansens on page eight of this issue.

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1999 Membership List

The 1999 membership list has been mailed. If there are any changes to your name, address or telephone #, please call Ruth Hoerich. Winter addresses are not shown but mailings will be made to those addresses as usual.

A correction: Annual dues are \$12.

Cover: Line drawing by Richard M. Smith from Wild Plants of America

GETTING TO KNOW YOU.....Aline Hansens

Carlson, Betty: P.O. Box 918, Bryson City, N.C. 28713
(828) 488-2422.

Coleman, Persis: P.O. Box 1057, Etowah, N.C. 28729
(828) 698-8010. Attracted by this area and moved here from Florida last June. Loves gardening and has taught some botany courses in Florida. Wants to learn native plants of this area.



Kelly, Thomas & Barbara: 162 Campbell Drive, Pisgah Forest, N.C. 28767 (828) 884-6143.

Petteway, Jo: Rt. 4, Box 285B, Hendersonville, N.C. (828) 692-7345. Winter address: 775 Milano Circle, Apopka, Fl. 32712.

Tierney, John: P.O. Box 291, Edneyville, N.C. 28727. (828) 685-7291. Retired Episcopal minister. Moved here from Canada in 1992. An ardent birder until some hearing loss changed his focus to botany. Loves nature and the outdoors. Learned of the Club from Erica Parmi & Anne Ulinski.

Williams, Barbara: #3 Sandrock Trail, Pisgah Forest, N.C. 28768. (828) 877-5009. Moved here last August from New Orleans. Loves the four seasons and the natural beauty of the area. Enjoys painting, plants, gardens and landscapes. Learned of the Club from Connie Updike.

Behind the Scenes

Bob Gunn Maintains the membership list
Harriet Kuster Types the twice-a-year schedules
Ruth Hoerich Coordinates all the mailings and sees that they are on their way to you.

Their services are much appreciated.

Each time I study a new plant I am amazed to find how much more I see after I have become thoroughly acquainted with it.

-Niko Tinbergen
"Curious Naturalists" (1959)

RECORDER RAMBLINGSBetty Jones

Our 1999 field trip season got off to a good start with 16 botanizers taking to the trails in the area of the Pisgah Forest Visitor Center on February 26. It was sunny and warm for that date - not "hardy souls" weather. Most of the group continued their hike up onto the Andy Cove Trail and were treated to blooming Trailing Arbutus (*Epigaea repens*).

The 24 participants in the walk at Holmes State Forest three weeks later were disappointed to find that spring flowers had not yet emerged. Last year's putty root leaves were in abundance, however.

The "Hardy Souls" sobriquet goes to Millie Pearson and Barbara Butenhof who did the Pearson Falls walk in a mixture of snow, rain and sleet. Though the trip was officially cancelled, Millie and Barbara turned in a trip report that included 28 identified plants, 15 of which were in bloom!

In sharp contrast to Pearson Falls was the walk along the South Pacolet River a week later - heat and very little shade. One special plant there was the rare *anemone berlandieri* which was in full bloom. The Station Cove Falls walk gave us a rich display of spring varieties: anemones, flowering trees, bloodroot, chickweeds, violets, etc. and the promise of more to come.

Dark overcast skies threatened to spoil the walk along the Davidson River and into the Sycamore Flats area. But the clouds drifted away and we had a relaxed pleasant walk. There were no spectacular displays of flowers, but just enough individuals to capture our interest.

Glassy Mt. Preserve served up its usual offering of uncommon plants: Appalachian Sandwort (*Minuartia glabra*), False Garlic (*Nothoscordum bivalve*) and Elf Orpine (*Sedum smallii*). The group spent some time identifying *Woodsia scopulina*, a fern which has limited distribution in this area.

Oohs and aahs were the response to the wonderful displays of trillium along the Pacolet Falls trail. Hikers at Kanati Fork also raved over the thousands of *Trillium grandiflorum*. A nearby stop yielded expanses of White or Fringed Phacelia (*Phacelia fimbriata*) and Wild Blue Phlox (*Phlox divaricata*).

Hikers who missed the Pacolet Falls and Kanati field trips had a chance to see *Trillium grandiflorum* on the Horse Cove walk. Since the season is late, the Wild Geranium (*Geranium maculatum*) and Gay Wings (*Polygala paucifolia*) had not yet reached their peak.

Lowell Orbison was our expert guide to the flora of the UNCA Botanical Garden. We kept no lists and just admired the well-over-a-hundred blooming plants among which were the azaleas and the "double" dogwood.

The Shinn Garden walk was cancelled due to rain. The Pilot Mountain field trip was cancelled so that our members could attend the memorial service for Dick Smith whose loss to our club is incalculable.

A NEW LOOK Betty Jones

Thanks to the computer, our checklists have a new look. I am experimenting with a variety of formats and I would welcome comments and suggestions for enhancing its readability and usefulness. Occasionally we will be using old copies of checklists until the supply runs out.

Several features are much easier with the computer: adding gridlines, inserting new species, using large and small print on the same document, etc. I have even eliminated the need for typing all those Latin and common names by using a table lookup that gives me the same spelling (possibly incorrect) every time. Please let me know if I have a misspelling so that I can correct my table. Also, if there is a change in a plant's Latin name, I would appreciate your telling me.

There are two schools of thought regarding numbering the species on the list. Numbers are easy to call out when we are on the trail where it is difficult to pass information to the end of the line. But is this too much of a crutch? Should we be using the Latin names consistently until they become comfortable for us? What is your opinion? Do you prefer "Number 29" or "*Medeola virginiana*" when you are on the trail?

With the aid of a computer database manager, I am attempting to transfer our 10+ years of botanical checklist data to a history file. Thus far I have keyed in the data from 74 walks, but with an average of 40 walks per year for more than ten years, I have at least 400 more to go. When this project is completed, we will be able to answer a question like the following: "Have we ever seen Gray's Lily (*Lilium grayi*) on our walks, and, if so, where and when?" Perhaps some of you have questions that you would like to pose to this database. Can you think of any interesting statistics we might extract?

Finally, if you are recorder for one of our field trips, just mail your report to me (at 186 Johnson Rd., Brevard NC 28712) as soon as possible after the walk. Also, if you have any checklists left over, just return them to me at your convenience - we'll use them the next time that walk comes up. Thanks, everyone, for your cooperation and encouragement.

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### WORKSHOP: LET'S LOOK AT MINTS

All mints have square stems; but all plants with square stems aren't mints. Have you heard this comment? Do you want to learn more about the mint family, Lamiaceae? If so, join the study group that will meet at the Cradle of Forestry on August 16. In the morning session we will look at flower structure and family characteristics. After lunch we will go to the field to apply our identification techniques. Call Bonnie Arbuckle to register for the workshop (828-696-2077). Registration is necessary to obtain free entry to the Cradle of Forestry and prepare worksheets to the class.

## PEARSON'S FALLS GLEN History and Mystery

Pearson's Falls Glen is located approximately three miles below Saluda and six miles above Tryon, off U.S. 176. Here the waters of Colt Creek rush down the face of a 91 foot rock cliff into the gorge and glen below to form unique waterfalls and park areas.

The 375 acres comprising the sanctuary contain over 300 species (including many rare ones) of flora native to Western North Carolina. Entrance is through a rustic iron gate supported on either side by a low stone wall with arches. Several trails lead to the waterfall crisscrossing rain-fed mountain freshets, small streams and springs as Colt Creek carves its way over boulders to join the North Pacolet [River].

The main trail winds along the creek from sunshine to shadow where the only sound may be the trickle of cold spring water over rock ledges covered with greenery of ferns and mosses and wild lettuce. Trillium, dutchman's breeches, wild anemone and foam flower bank the trail in profusion each spring. One import, the rare *Shortia galacifolia* or Oconee-bells, has been added to the park's flora in recent years.

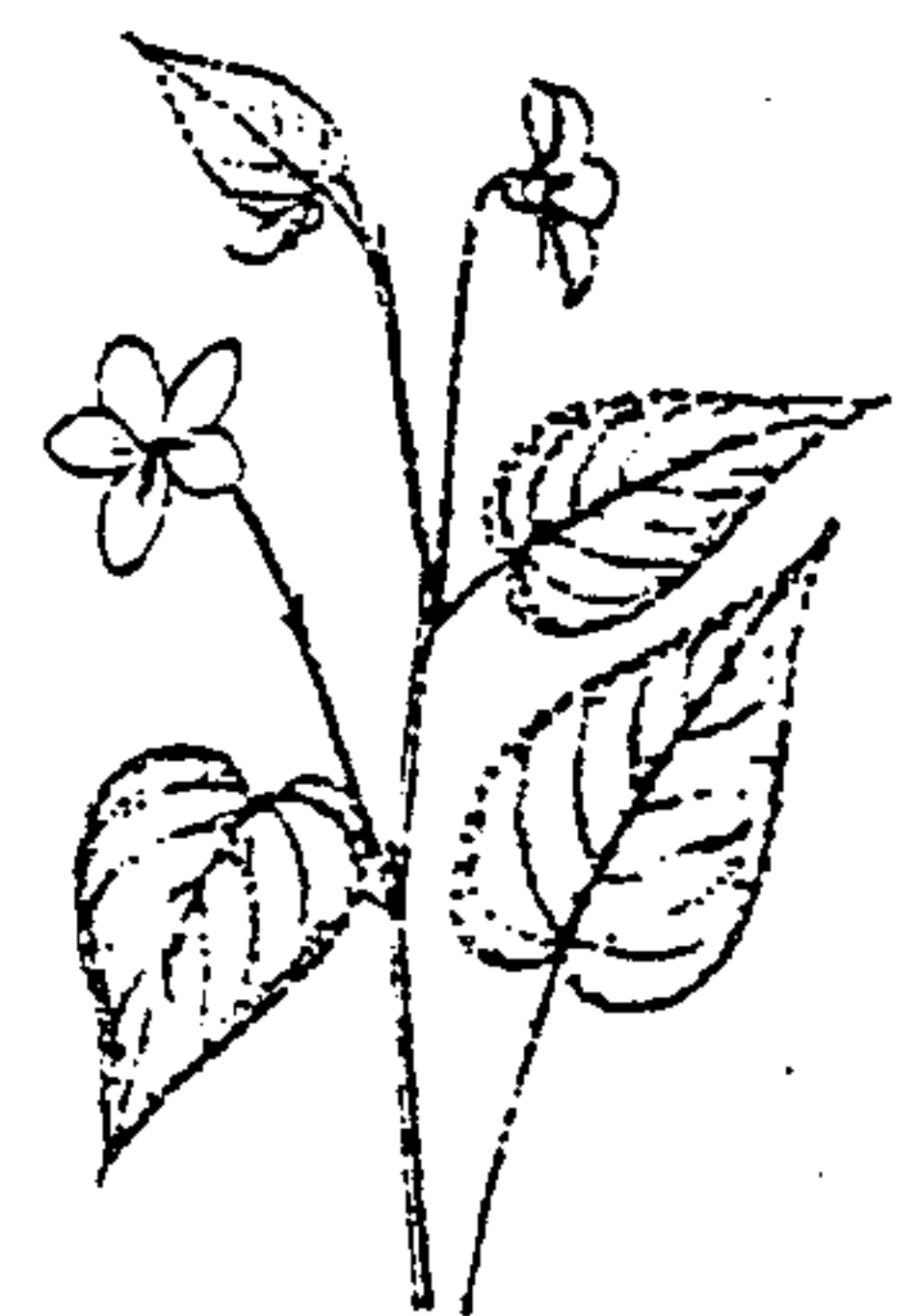
Long before reaching the end, the roar of water can be heard; then mist drifts through the air and the roar of rushing water fills the gorge. Bright sunshine and deep shadows, warm and cool breezes fill the glen, making understandable the Native Americans' belief that it was inhabited by spirits, a forbidden place where water spirits gathered, played, danced and sang. Game was never followed into the gorge; no campfires were built at the foot of the roaring waters. These beliefs were passed on to early white settlers. Hunters called off their dogs or left them to make their way home if they ventured too near this glen of magic and mystery.

\* \* \* \*

When the Asheville-Spartanburg railway (now the Southern) was looking for a pass through the mountains, they sent a young engineer, Capt. Charles William Pearson, down the river of the laughing waters, Pacolet. He discovered the nameless glen and in 1876 he bought the glen as a part of a larger tract where he settled his family. Many of Capt. Pearson's descendants, including Club member Millie Pearson still live on land of the original purchase.

The article above, modified for publication by Pat Arnett, was written by Millie Pearson's niece, Priscilla Pearson at the celebration of 50 years of ownership of the glen by the Tryon Garden Club. Priscilla is the great-granddaughter of Capt. Pearson.

Canada violet (*Viola canadensis*)  
grows in profusion at Pearson's Falls



NOTES FROM WHITE SQUIRREL ..... Charles R. Gunn



*C. sativa*  
(male plant)

The genus *Cannabis* is one of two genera in the Cannabaceae: *Cannabis humulus*, the hops of beer brewing and the controversial crop, *Cannabis sativa* (marijuana). I will leave it to others to decide whether marijuana in the cigarette form should be legalized and taxed. We want to consider *Cannabis sativa* from the botanical viewpoint.

When I lived in Iowa, 1961-1965, I saw many plants of *C. sativa* along stream banks and in low waste places. The plants, whose seeds were spread to these areas by birds and then became naturalized, originally came from fields of *C. sativa* or hemp grown for fiber, oil, and seeds. There are USDA/ARS publications covering the farming of hemp and the storage of its seeds. By federal law passed in 1938 our valuable crop plant, hemp, became the illegal plant, the scourge of our youth, marijuana!

Thanks to Ernst Small, Canadian Department of Agriculture, and Arthur Cronquist, New York Botanical Garden, we now know *Cannabis sativa* is a species complex which includes:

Plants of limited intoxicant ability - subsp. *sativa*, hemp, with two varieties - var. *sativa* and var. *spontanea* (the variety I saw in Iowa).

Plants of considerable intoxicant ability - subsp. *indica*, marijuana, with two varieties - var. *indica* and var. *kafiristanica*.

*Cannabis sativa* is one of the oldest crop plants, cultivated for its bast fibers in the stem, oil in the fruit, seeds and intoxicating resins produced by epidermal glands. The subspecies and varieties are the result of human intervention.

In 1998 in Canada 5930 acres of hemp were planted by certified Canadian farmers. and this can be sold legally for fiber and seed oil.

A legal case in Kentucky may clarify the federal law on *C. sativa*. Did Woody Harrelson (of Hollywood fame) plant hemp or marijuana seeds? As an outcome of this case, perhaps the law will be changed to name only subsp. *indica* as marijuana and hemp may become available as a replacement crop for tobacco.

*Bob Gunn as former director of the U.S. National Seed Herbarium was assigned to the New Crops Research Branch and thus has more than a passing interest in new crops for the United States and the world.*

## DICK SMITH, OUR MENTOR AND FRIEND ..... by Elton Hansens

On the corner of my desk are two books, Wild Plants of America and Wild Flowers of the Southern Mountains, both by Richard M. Smith, the amateur botanist we knew so well. In the "Acknowledgements" in "Wild Plants of America" he wrote, "For me, getting to know wild plants has always meant going trudging up a steep trail peering for trailing arbutus, ambling through a sunny meadow aglow with goldenrods and asters, scuffling through fallen leaves to uncover the year's last gentian, crunching over crusted snow to tell the fortunes of swollen tree buds. This was the way my father taught me. It happened to be the only way, for I never knew him to uproot a plant from the wild for his garden, but I also saw it as the right way; and am grateful for his example.....I moved to the botanical treasure house that is the southern Appalachians, and I was not disappointed. The Western Carolina Botanical Club proved to be an exceptional group of energetic, imaginative, and compatible individuals with interests identical to my own....."

Dick Smith retired from New York to Connestee Falls in Brevard in 1978. Here he was free to pursue his love for flowers, photography, and to explore the Blue Ridge Parkway.

In 1982 he led five WCBC meetings between January and June ---1. Pioneer Botanists of Western North Carolina, 2. the Heath Family, 3. a hike along the Davidson River, 4. a visit to the Clemson U. Experimental Forest, and 5. Kephart Prong Trail. This was quite a contribution from a new member.

In 1981 Dick introduced "LOOK AGAIN!" as a regular contribution to SHORTIA, the WCBC newsletter. Recently he revised some of the early issues for use in 1999.

Dick was elected WCBC President in 1983 and 1984.

The Buck Springs Nature Trail on the Parkway was proposed by Elton Hansens and Dick won approval from the Parkway. Many club members helped with identification of flora and marking locations with numbers. Dick and I worked together every step of the way. Finally Dick prepared a brochure, "Buck Springs Nature Trail, a Botanical Tour", which was published and distributed by the Parkway. The project was completed in 1989. The trail and brochure now need revision.

Dick's latest book Wildflowers of the Southern Mountains is special!! I am particularly impressed by his dedication: "In memory of my mother who would have loved this book, and my father, who could have done it better." This guide focuses on more than 1200 species found in the Blue Ridge physiographic province. The 600 color plates are the most impressive feature of the book. Dick with his special talent was able to photograph the details of each plant.

Our WCBC members are very aware of the many contributions of Dick and Jeanne to our Club. Several years ago they were named Honorary Members.



# LOOK AGAIN!

The average garden contains so many exotic species and artificial hybrids that it is easy to forget that some native North American wildflowers were long ago brought into cultivation unchanged. A few that come to mind are the hardy and beautiful New England Aster, the Blazing Stars (Liatris spp.), and the so-called Moss Pink or Thrift (Phlox subulata).

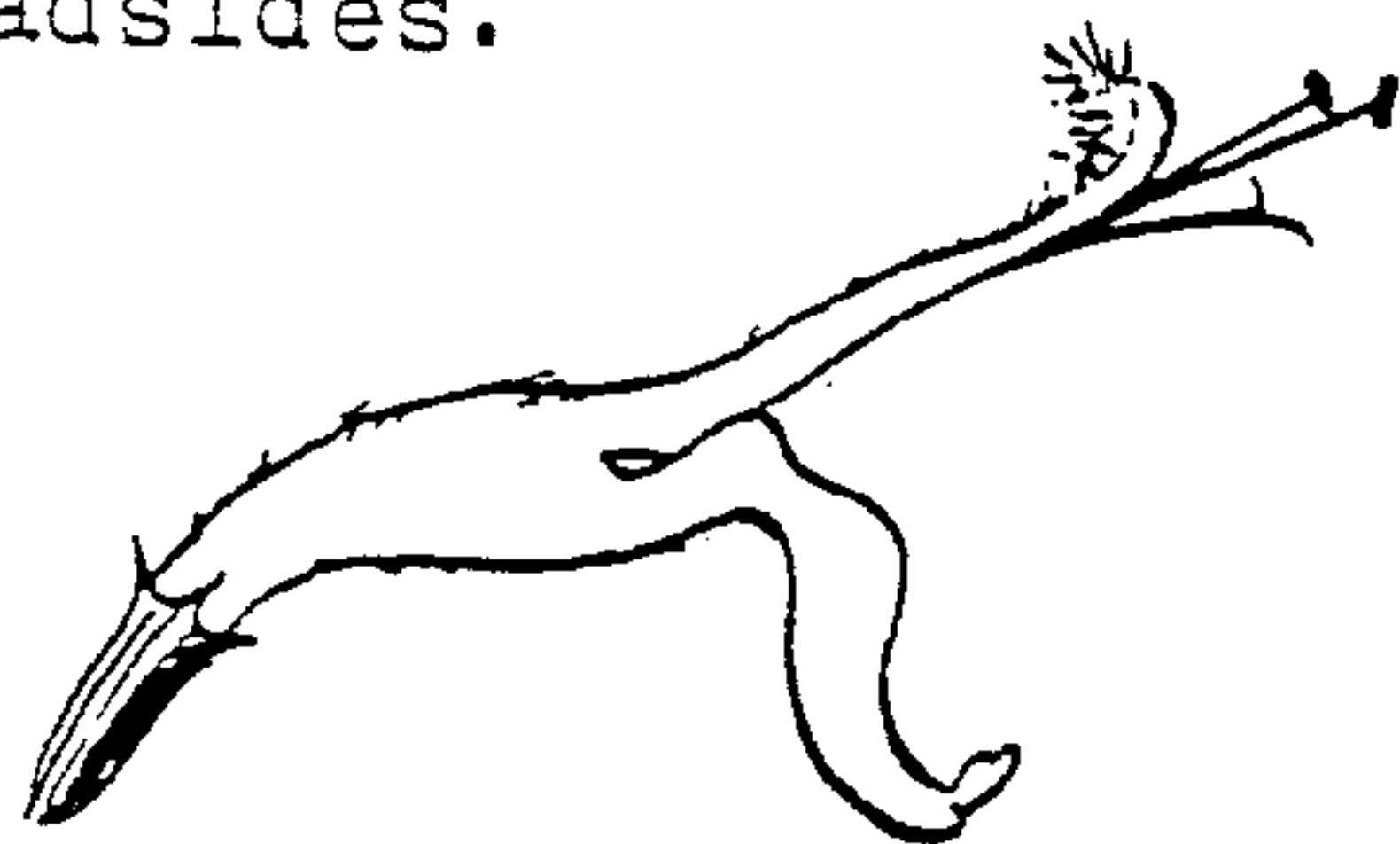
Another familiar example is Bee-balm, or Oswego Tea (Monarda didyma). This showy member of the Mint Family was used by Indian tribes in the northeast as a flavoring agent, and during the colonial period the residents of Oswego, New York, made a beverage from its leaves in protest against the tax levied by the English on imported Oriental teas. This particular species is the one with bright crimson flowers, and in the wild it favors wet situations.



MONARDA DIDYMA

There are several other Monardas in our area, and all of them have a dense terminal head of long, tubular, two-lipped flowers subtended by leafy bracts which tend to be suffused with color corresponding to that of the corolla. All bloom in the summer and early fall.

The most abundant is Wild Bergamot (M. fistulosa), with pink or lavender flowers each having a distinctive tuft of hairs near the outer end of the upper lip. This very fragrant species is more likely to be found in dry open woods or fields or along roadsides.



M. FISTULOSA

Basil Balm (M. clinopodia) is widely distributed in the southern mountains. It has white or pinkish flowers which are spotted with purple and lack the tuft of hairs.

Occasionally one will find what appears to be a color variant of Oswego Tea, with flowers of rich purple instead of red. This is thought to be a natural hybrid of M. didyma and M. fistulosa, and has been named M. media.

Dick Smith

S H O R T I A

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Editorial Assistance: Pat Arnett

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Please submit contributions for the next issue by August 15 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:

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|----------------------------------------------------------------------------|
| Rachel Conway, Treasurer<br>211 Aldersgate Circle<br>Asheville, N.C. 28803 |
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