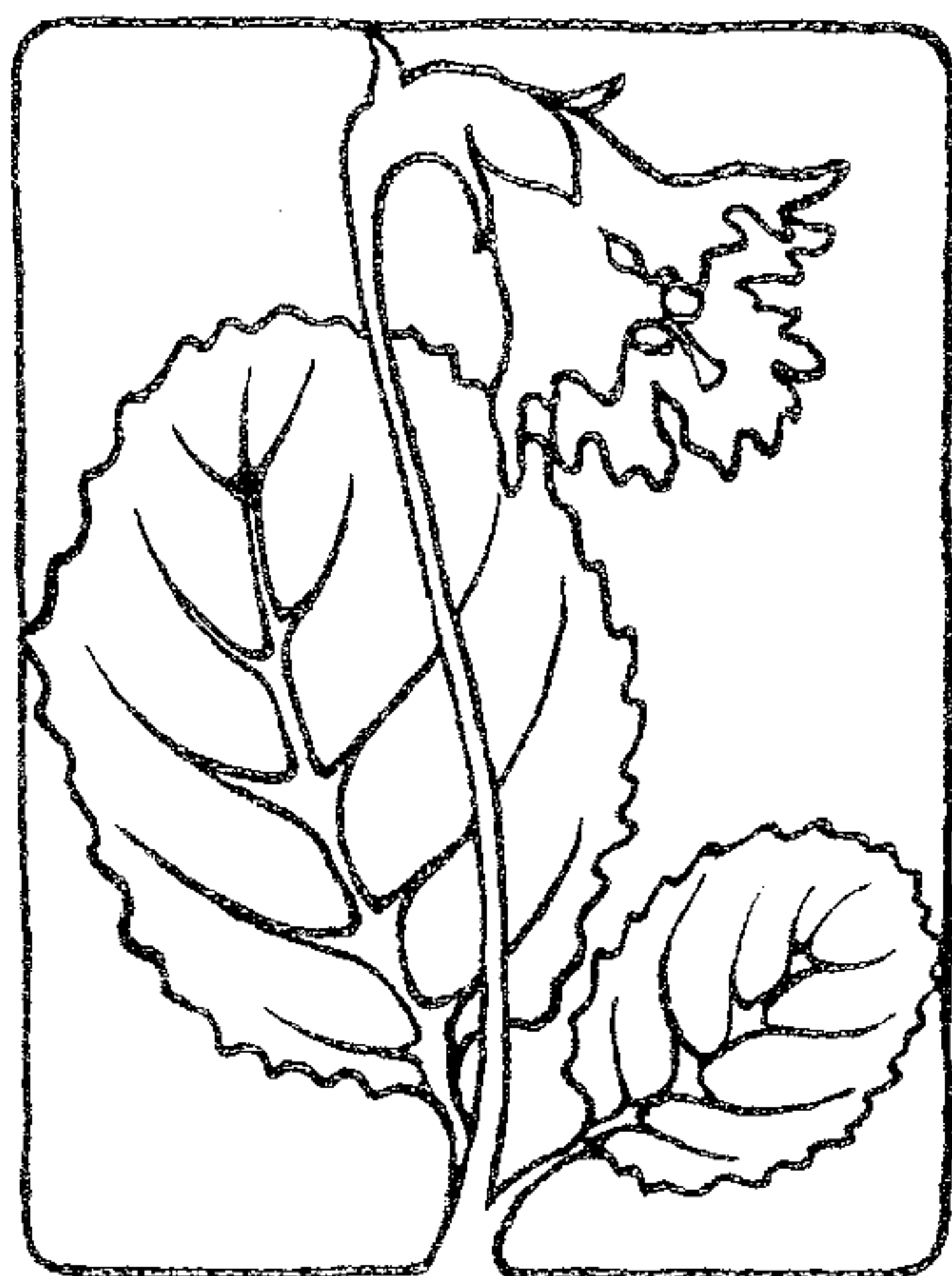


SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB

AUTUMN 1982



HELEN TURNER, Editor

'TIL WE MEET AGAIN

Some people in a club work wonders in quiet ways, providing strength for the growing organization far beyond the realization of many members. One such person, a guiding light in our Botanical Club since its inception in 1972, is moving from Hendersonville and will be missed by us tremendously. I speak of Harvey Krouse, of course.

The members who have joined our club in recent years may not be fully aware how many roles Harvey has played in our organization. As a charter member, he was a prime mover in helping set the club on its feet. His knowledge of places to find special species has made him a consistent and important contributor on the committee which plans our itineraries, and his expertise in botany has been invaluable. How often has the solution to a problem about some plant come easily when someone stated, "Ask Harvey!" He answers quietly, then explains and enlightens us along the trail.

Harvey has led several field trips annually, presented slide programs, served very ably as president for three years, and initiated and edited SHORTIA until 1982, with the able assistance of Verna, his lovely wife-secretary and our special friend.

These folks who are so important to our club will move to Newton, NC, near Hickory:

Mr. and Mrs. Harvey D. Krouse
330 Geitner Ave., Abernethy Village
Newton, NC 28658

Harvey and Verna, we give you our warmest best wishes in your new venture, thanking you deeply for your solid contributions to the Western Carolina Botanical Club. We will miss you not only as associates in the club but as Hendersonville friends.

Newton is not far away, and we're hoping -- expecting -- that you will join us from time to time!

Barbara Hallowell

WELCOME

Carman, Charlotte, 403 Deerhaven Lane, Haywood Knolls ... 891-9550

Clark, Gertrude, 107 Old Kanuga Place 692-5523

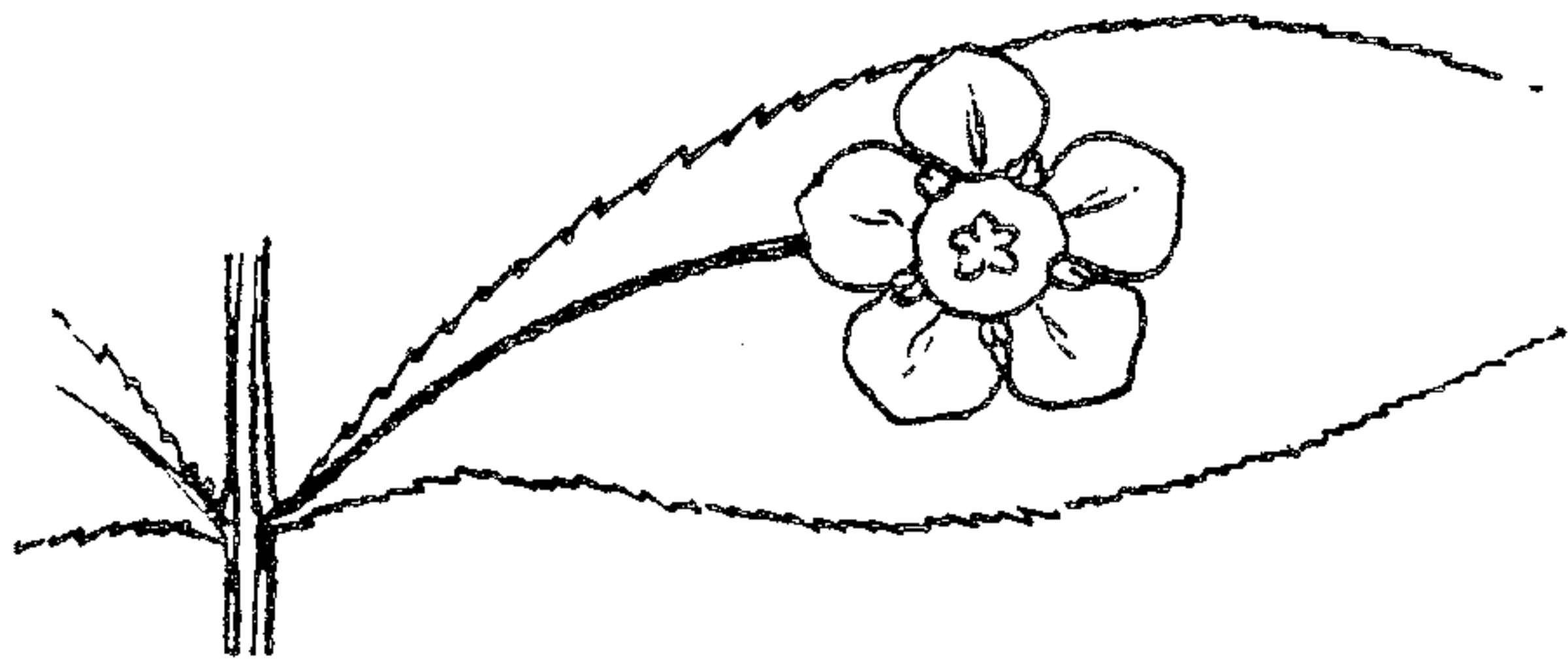
Parmi, Erika, Rte. 2, Box 44E, Pisgah Forest 28768

Rice, Ed

Schifeling, David & Anna Lee, Rte. 1, Box 122A,
Brevard 28712

LOOK AGAIN !

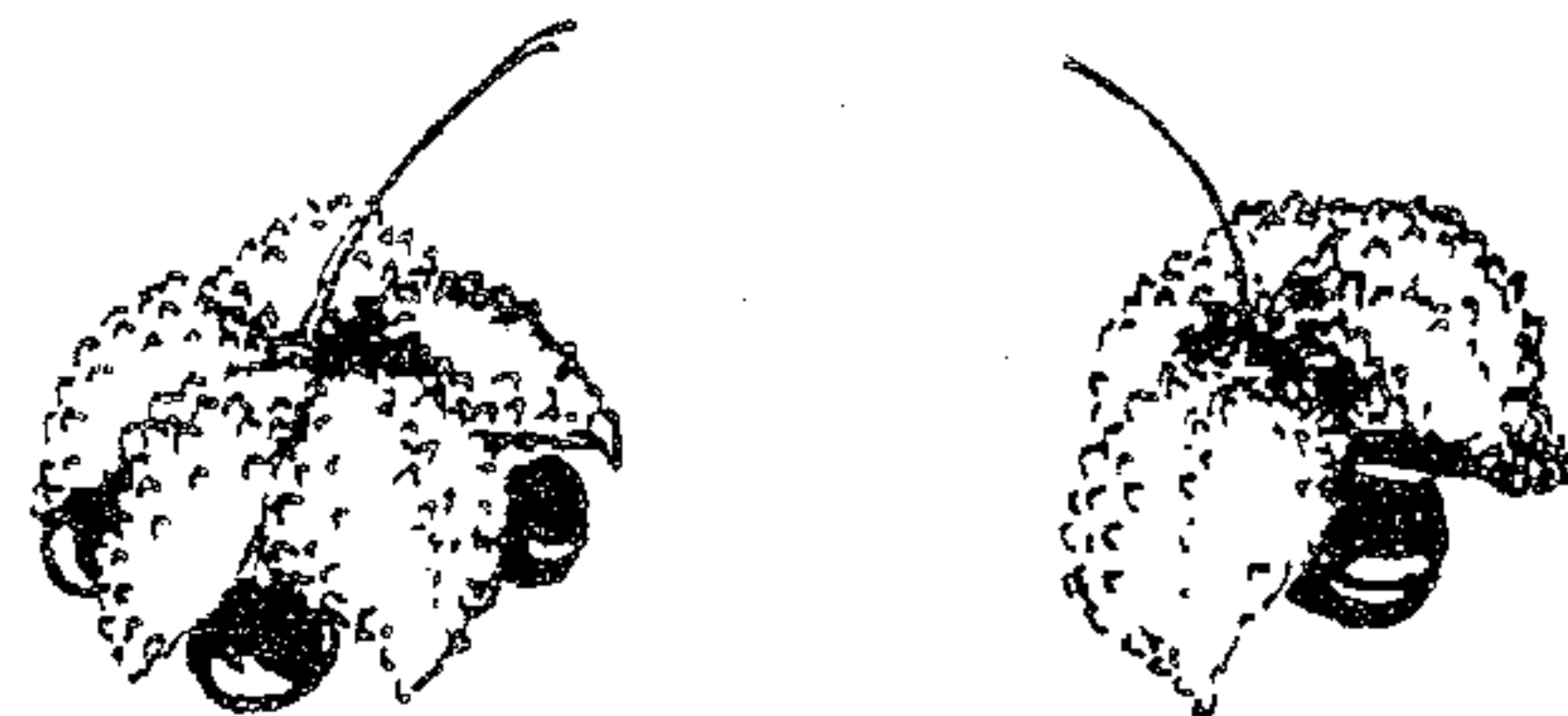
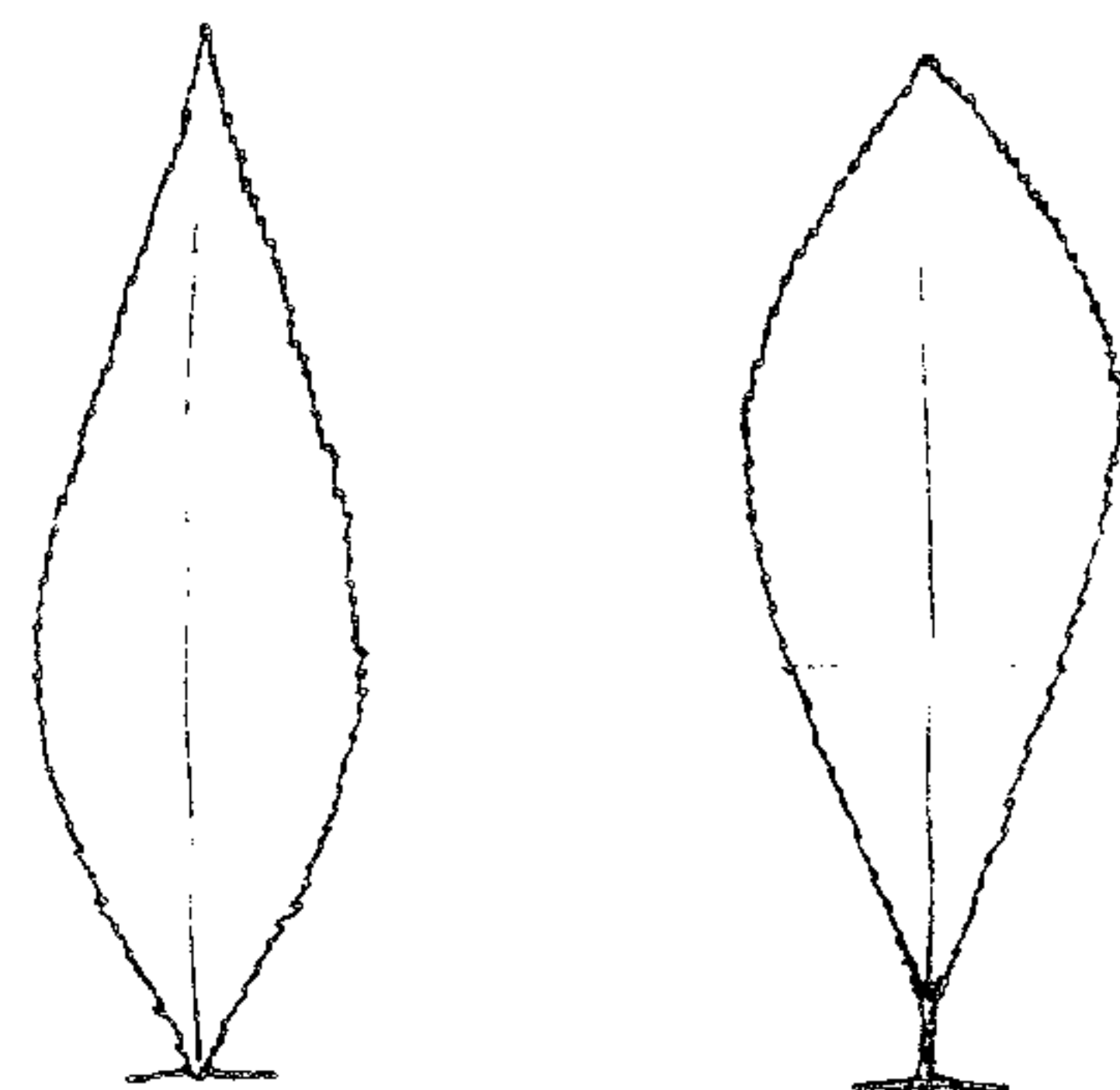
Anyone seeing Euonymus americanus for the first time when it is in flower may be excused for raising an eyebrow at being told that its popular name is "Hearts a'Bustin' with Love." After all, the flowers (which bloom just when the spring woods are their prettiest) have little going for them. They are sparse in number, modest in size, and so flat as to appear almost two-dimensional. And their color is so undistinguished that no one label suits; one must call it something like "pale creamy purplish yellow-green."



But a return visit in September furnishes all the explanation that is needed for the quaint colloquial name. Where the drab little flowers had been there now are brilliant pink, warty capsules opening up to expose shiny ver-

million arils, which in turn enclose the seeds. These colorful fruits also account for another name, "Strawberry Bush."

Although many of us are not aware of it, the "Hearts a'Bustin'" appellation is also given to a similar species, Euonymus obovatus. Both are square-stemmed bluish green shrubs with flowers that are virtually identical, but Euonymus americanus is erect and may attain a height of six feet, while in E. obovatus the main stem is prostrate and the ascending branches do not exceed two feet. For this reason, the latter is sometimes called "Running Strawberry Bush." The specific name also holds another clue: the leaves are obovate, or widest above the middle. The most striking difference, however, is seen in the fruits, which in the case of E. americanus are usually five-lobed whereas those of E. obovatus split into only three parts.



Both of these shrubs belong to the Staff-tree Family, which counts among its other members Celastrus orbiculatus, the rampant Oriental bittersweet vine which has overwhelmed native shrubs and trees in some areas, and C. scandens, the less aggressive American bittersweet. In each of these, the crimson arils revealed by the splitting of the yellow-orange capsules betray its close relationship with our species of Euonymus.

Dick Smith

RAMBLINGS --- PEOPLE, PLANTS AND PLACES

A baker's dozen trips (13) from mid-May to mid-August kept us on the go. Nearly 30 enjoyed the Tabers trip along the HORSE COVE TRAIL with a pleasant lunch by the stream. The Tooleys invited us to their HARDLUCK RIDGE home with lunch beside a neighbor's lake -- a great day-- thanks for the special hospitality. John Kuhn led the trip on the EAST FORK OF THE PIGEON RIVER -- one of our favorites. In addition to 48 flowers we found ginseng again. You didn't kill it when you sat on it, Dick! (Remember a year ago?) The last trip in May was to Camp Strauss, arranged by Peggy and Nan. It was a lovely place for a "covered dish", a bit wet but good fellowship. Eb Morrow, everyone loved the potatoes 'n ramps!

The first of the 4 trips in June was a most interesting lichen hike, led by Dr. Sierk along MT. PISGAH TRAIL. We do appreciate his expert help. Sam Childs kept us in tow on the CRAGGY PINNACLE walk: a lovely forest, many flowers, spectacular rhododendron and a great view from the shelter at lunch time. The trip to HOLMES STATE FOREST was led by Sam Childs and John Kuhn. At lunch we feasted on a home-grown watermelon provided by Christine Clark -- good! Miles Peelle led us along BUCK SPRINGS TRAIL through a deep, cool forest with many ferns and 34 flowers.

In July the Tabers took us along the DAVIDSON RIVER -- a multicolored thing among the ferns turned out to be a bowling ball retrieved by Wendy, Peavey's granddaughter. Remember the tadpoles in the puddles, the huge osage orange tree, the old basswood with showy orchis and resurrection ferns growing on it and a deer bounding across the meadow as we ate our lunch? BEARWALLOW MT. was a ride-hike led by Miles Peelle who was hard pressed to keep up with all the questions about 65 flowers. Chiggers anyone? Some knew they were there! Ben Tullar led on ROAN MT., always a favored trip -- a lovely day and many flowers. On the BENNET GAP TRAIL, led by Bruce Leech, we had more excitement than we bargained for -- botanizing, a drive to the top and hike down an old logging road and an old tree stump with a noise first noticed by Elton Hansens -- a cicada? He looked down and there was a timber rattler warning us away -- two more were there, including a very large one -- all coiled but lethargic. Elton took pictures to prove to you all that we saw them. Fascinating! And luck was with us as none of us had ever seen one "in the wild." The MT. PISGAH hike, led by Chuck Snow, had a drizzly start but fog lifted so we had a good view from the top -- and blueberries galore.

Besides the hikes, we made our annual WORK TRIP to the UNCA Botanical Gardens where 13 of us weeded the beds. Dr. Orbison, in a letter to our president, expressed deep appreciation for our help.

There were 2 slide shows. PREVIEW OF SUMMER FLOWERS was presented by George Lemieux who also displayed some of his beautiful enlargements. PREVIEW OF FALL FLOWERS by Harvey Krouse included not only slide of flowers (John Kuhn's since Harvey's were packed for moving) but also a brief lecture on the goldenrods -- see Key on last page of this issue of SHORTIA.

After lunch at Camp Strauss in May, John Kuhn raffled off a copy of The Manual of the Vascular Flora of the Carolinas, a gift to the WCBC from Harvey Krouse -- 59 tickets at 50¢ each added \$29.50 to our treasury. The winner was the Foresman's granddaughter who literally danced for joy. Thank you, Harvey and John!

Our congenial club members also ramble further afield! MARGARET KUHN took off by herself (John's not a traveler these days) to attend a National Wildlidge Summit Conference at Lake Louise and the Banff-Jasper Park area in Canada. The people from everywhere, the meeting and the hikes were most rewarding experiences -- the scenery, spectacular. PHIL and KITTY BABCOCK attended a different Summit -- at Black Mt., NC -- and especially enjoyed meeting people from all over the country. CHUCK and JANET SNOW went to still a different Summit in Wisconsin.

BARBARA and TOM HALLOWELL have been busy this summer! The Smoky Mt. Field School in Smoky Mountain National Park offers weekend and week-long courses all year round. Barbara found a 5-day course on native trees most informative since it was centered outdoors. At the 6-day session of the National Wildlife Summit at Black Mountain, Barbara took some classes, taught one on ferns and gave two evening programs. Tom participated by quietly working behind the scenes helping to make all go smoothly, providing information about things to do and see in the area, etc. And -- they have just returned from a most satisfying experience on the Coppermine River, Northwest Territories, Canada, above the Arctic Circle. Twelve persons went rafting down the river, studying tundra fauna and flora, fishing and camping, completely isolated for two blissful weeks -- no phones, no TV's, no people for hundreds of miles.

DICK and JEANNE SMITH are just back from a trip in New England where they attended the annual meeting of the Vermont Institute of Natural Science, Woodstock, VT. A highlight was a lecture-slide program on the "Penguins in the Falkland Islands" by Dr. Olin Pettingill, former head of Ornithological Labs., Cornell University. While hiking trails in the White Mountains they found many purple fringed orchids. On the way home, near the Virginia-North Carolina border they found masses of yellow fringed orchids and many white spikes of Culver's root, some 6-8' tall.

When we were at Holmes State Forest in June, a newspaper article made the rounds for it showed a picture of MILES PEELLE, as a naturalist at Bok Tower Gardens in Florida, leading a group on a tour which he does on a regular schedule from Dec. 15-April 15 each year. We feel lucky to have him here for the Summer and Fall!

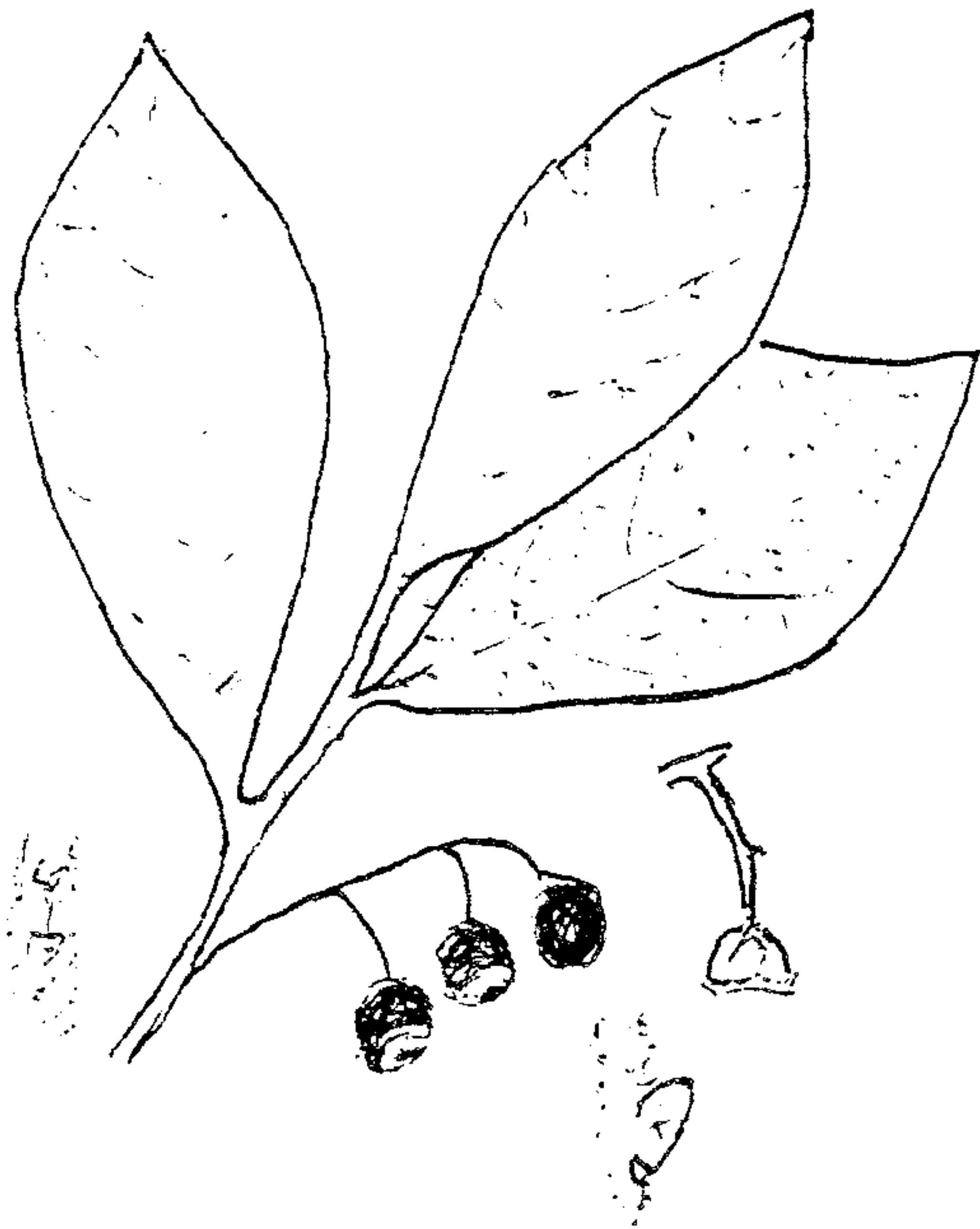
Louise Foresman, Historian

Hi; Luweezy, Hi; Luweezy
Lovely Day, nice and breezy
All those flowers shining brightly
Mark them down, all so rightly
Ther's Prunella, called Heal All
And great Lobelia, growing tall
A Cardinal Flower with petals red
Next a sunflower with yellow head.

Up above a sky of blue
Flowers here of every hue
The bees are busy every hour
Making a visit to every flower
They are welcome every time
I put that in to make it rhyme
Climbing a hill we get a little wheezy
But we enjoy it all, don't we Luweezy?

J.F.K.

BUCKBERRIES



For those who enjoy wild fruits, August is berry picking time. Buckberry, an edible wild berry, is one of the huckleberries and a member of the Heath family. It is very special because it is one of the plants indigenous to the Southern Appalachians, growing in a rather restricted area: Transylvania and seven other counties in North Carolina, three adjacent counties in South Carolina and a few counties in Georgia and Tennessee.

A much-branched shrub, buckberry tolerates acid soil and covers the ground of oak and hardwood forests. Though it is

usually a low growing shrub about 4 feet tall, specimens are known to reach a height of 15 feet in some areas of the Great Smoky Mountain National Park.

Gaylussacia ursina is its botanical name. Gaylussacia, the genus name for huckleberries, honors Joseph Louis Gay-Lussac (1778-1850), a French chemist best remembered for his law concerning the volume of gases. His work laid the foundation for the food canning industry. Ursina means "like a bear." Perhaps when bears were more plentiful in the Appalachians, the fruit of this shrub was one of their foods; this may account for the folk-name of bear huckleberry.

The fruits develop from the typical urn-shaped heath flowers which appear in racemes on second-year wood in late April and May. When the fruit first forms, it hangs from short, yellow-shading-to-red stalks, like shiny red beads beneath the smooth bright green leaves. It darkens to a deep red and finally turns a shiny black by mid-July. At this stage the fruit is edible but tart. When it becomes a dullish black it is very tasty. Buckberry is often confused with wild blueberry, but the most obvious difference is the seeds: buckberry contains ten seeds, each of which is enclosed in a hard, bony covering; blueberry contains a large number of small, soft seeds.

A hand lens will reveal another distinguishing feature of the buckberry: the many yellow, dot-like resinous glands on the underside of each leaf. Rust colored hairs on the stems of this year's growth continue along the midrib on the underside of the leaf which is elliptically-shaped and wider near the tip. It ends in a tiny dripping point which helps the leaf to shed water.

Millie Blaha

KEY TO WESTERN NORTH CAROLINA SOLIDAGO (Harvey Krouse)

- Inflorescence a flat-topped corvmb
Leaves linear, entire, base attenuate (rare) graminifolia
- Inflorescence paniculate, racemose or in axillary fascicles
- I. Flower heads along upper sides of branches (secund)
 that curve outward (open panicles). Many very tall growing
- A. Lower stem leaves have three principal veins
1. Involucres 3-5 mm long
- a. Stems closely and minutely pubescent throughout.
 Inflorescence somewhat strict
- a. Stems glabrous throughout, often glaucous
 (whitish bloom). Inflorescence more lax, recurved.. altissima
1. Involucres 2-3 mm long; noticeably small-headed;
 stems pubescent. Panicles large, lax
- a. Lower stem leaves have one principal vein
1. Leaves with distinct petioles
- a. Lower leaves broad, stem smooth except in inflores-
cence, branches of inflorescence often without
heads on lower half arguta
- a. Lower leaves narrow, tapering into petioles
- b. Stems terete (round); mostly in dry, open places
- c. Leaves toothed, rough and wrinkled, many
and close on stem; stem usually very hairy ... rugosa
- c. Leaves not rough and wrinkled
- d. Leaves lanceolate, lower cauline ones
cuneate speciosa
- d. Leaves not lanceolate
- e. Glabrous throughout, basal leaves
broad, tapering into long petioles
colonial in dry open places juncea
- e. Stem hairy; leaves wider toward tip,
toothed and downy; along road banks nemoralis
- b. Stem square or angled, stout; always in wet places
- c. Leaves very scabrous (rough) above patula
- c. Leaves smooth or essentially so above uliginosa
1. Leaves without petioles; leaves narrow, entire,
punctate (spotted); anise odor; open, dry areas odora
- I. Flower heads in tall cylindrical clusters (racemes)
 or in leaf axils; many growing in woodlands
- A. Rays white; dry soil, open areas at elevations over 3500'. bicolor
- A. Rays yellow
1. Tips of bracts distinctly bent outward and downward
(reflexed); rare squarrosa
1. Tips of bracts oppressed (close against), not reflexed
- a. Heads in axils of leaves. Stems angled by
slightly decurrent lines
- b. Leaves on long petioles; stems zigzag flexicaulis
- b. Leaves without petioles. Mostly in woods
- c. Stems lax, purplish, glaucous caesia
- c. Stems erect, green, not glaucous curtisii
- a. Heads mostly in cylindrical close racemes;
leaves tapering into petioles
- d. Heads less than 1 cm broad from ray
apex to ray apex
- e. Stems very minutely puberulent (under
magnification); lower surface of leaves
glabrous
- f. Heads dense, cylindrical puberula
- f. Heads narrow and loose petiolaris
- e. Stems essentially glabrous
- g. Tall plant to 8'. Bracts oblong,
tips rounded, coarsely 1 nerved;
leaves continuous into inflorescence
which is narrow and loose erecta
- g. To 3' tall; bracts linear;
inflorescence dense, cylindrical ... roanensis
- d. Heads 1 cm broad from ray apex to ray apex
Stem and basal leaves toothed; coarse
plant 4' tall glomerata

S H O R T I A

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Please submit contributions for next issue by Nov. 15.
