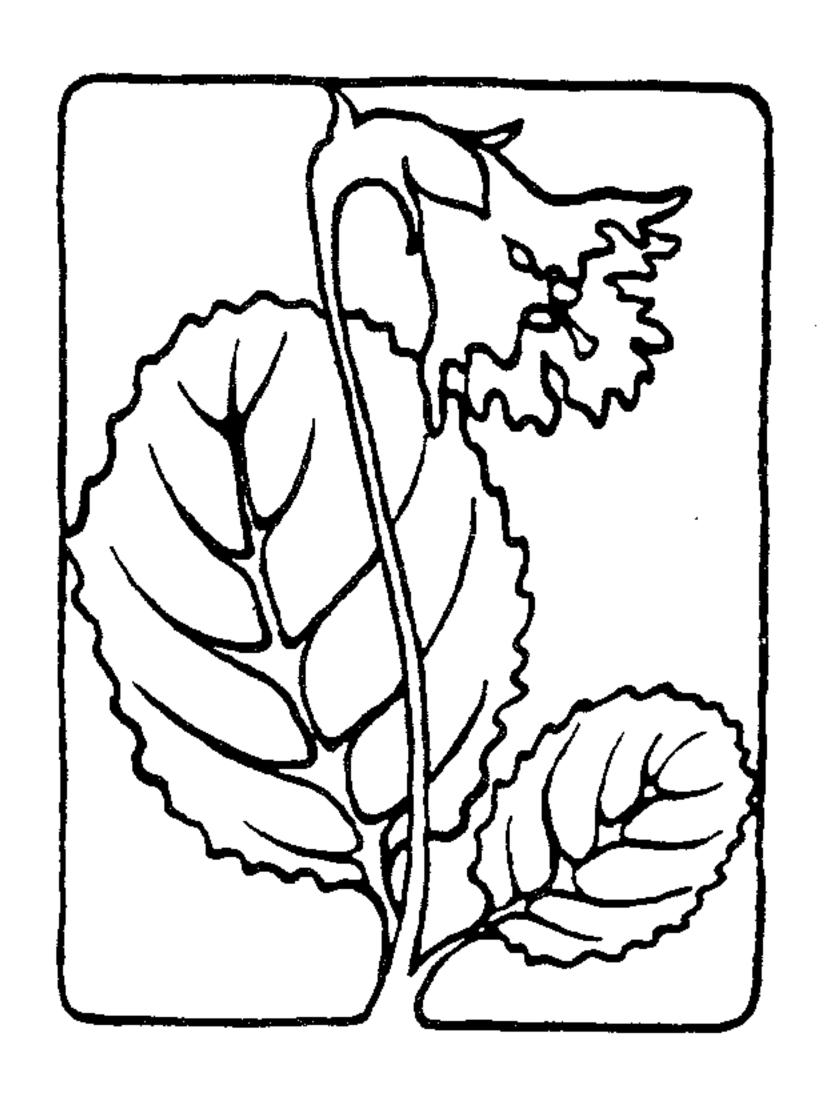
# SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB

AUTUMN 1997



ELTON and ALINE HANSENS

Editors

#### WESTERN CAROLINA BOTANICAL CLUB

President: Vice-President: Secretary:

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Rachel Conway Recorder: Erika Parmi Historian: Louise Foresman

I am sitting here on the front porch overlooking the valley and up toward Mt. Pisgah. A blue haze still obscures Pisgah as it did when we were on top. However, it was great hike, up and down. Despite previous storms we did find a great variety of flowers in bloom. A club like WCBC can always find something of interest and in bloom.

This was true at the picnic at Ramblewood. Millie left me with a plant list larger than I know. This led to some good botanizing for those who rambled. Again weather cooperated, so it was a good day for walking and eating outside. Even though some "unknown" 130 lb. heavyweight collapsed one of the rotten benches, no one missed a lick. It has been repaired with 2  $_{\rm X}$ 4's. Can't wait 'til next time.

The kitchen crew did a fabulous job. This place hasn't been this clean in a long time. As I returned from showing everyone out, they were still washing the dishes and even running the vacuum. That's what I like about this club. It is the cooperation of the membership.

If only the meadow would do as well. The spring beauties have finally made their appearance but only on the outer fringes of the meadow. Now the mosses are really taking over. I know a lot of people love mosses, but they are crowding everything else out. This makes the dogs very happy--they love to roll in the luxury of the moss. The cats don't care. So be it!!!

Keep your eyes on the schedule--more is on the way. A meeting of the Scheduling Committee is coming soon. If you have any suggestions please contact your club officers; we would like to hear from you. New ideas and suggestions are always welcome.

#### JOHN KUHN -- A TRIBUTE

JOHN KUHN, a long time member of WCBC passed away early this year. He and his wife Margaret joined the club in 1975 and became active, interested members. John knew his plants and willingly shared his knowledge. He led many hikes and presented slide programs of native flowers each spring and fall for many years. In 1987 John and Margaret were made Honorary Members, an honor well bestowed. In 1986, after moving to Carolina Village, failing health took its toll, preventing active participation in the club. To those who knew John, he will always be remembered for the flower he loved to call "the poor man's orchid", Prunella vulgaris.

DOING YOUR PART?.....DEAN CRAWFORD

All of us are surely aware of the truism that a club made up of volunteers, such as ours, is only as strong as the active support the members give. There are also the corollaries that every member (recent or longterm) who is physically able should feel obligated as part of membership to take on some jobs from time to time; and that hardly ever does any one member want to feel compelled to repeat a job over and over. There should be a continual influx of new workers.

As chair of the current Nominating Committee, I've become more aware of (1) the many jobs there are to be done in and for the club (some elective, some appointive) and (2) how little time and effort is truly necessary for most of the tasks; almost any of us can handle almost any of the jobs.

Among the elective offices we have a President (presides over one annual meeting and two schedule-planning meetings, plus makes appointments); a Vice President who assists the President and fills in if needed; a Treasurer who collects dues, pays bills and keeps financial records; a Secretary who takes and reports minutes of our one annual meeting; a Recorder who keeps plant lists of most of our field trips and recruits trip recorders; and an Historian who keeps the archives of past publications, etc. Some of these take more time than others, to be sure, but none are jobs that you couldn't handle if you live in the region and are physically mobile. Some would be particularly useful experience for those truly interested in learning more about wildflower identification or club operations.

There are also many tasks done by people who are appointed. This includes those in charge of, with others assisting, editing, printing and mailing our twice-yearly Program Schedules and quarterly newsletter Shortia; field trip leaders and co-leaders who can be people who are not necessarily accomplished botanists but will be conscientious about locating the assigned trail and scouting it in advance to identify what's there; people to help with planning, setup and food supplies for potluck events such as picnics, cookiefest and annual meeting; coordinators for overnight journeys; and others.

We admire and honor those who started the Club and those who've kept it going all these years. Isn't this a good time for YOU to step forward? It's so easy, and also rewarding. All you need do is make your willingness known to the President or any other elected officer (names are listed in each Shortia) and they will surely see that your message is relayed to the proper persons. Don't feel that you somehow must be an expert at anything; all you must be is willing to try!

In my explorations of the Great Smoky Mts. Nat. Park trails for the WCBC overnight, I finally hiked the Kanati Fork Trail which I had always wanted to do, since it is always listed in the spring issue of "The Smokies Guide" as a good place for flowers. In my opinion it rates the top of the list along with the Cove Hardwoods Trail at the Chimneys Picnic area. Apparently WCBC passed it over because of a presumed difficult 2000 foot elevations gain. I hiked it twice on April 9 and 16. This trail is on Rt. 441 (the Newfound Gap Rd.) on the NC side about 8 miles north of Oconaluftee Visitor Center. There is a large parking area on the right and the trail enters the woods on the other side of the highway.

The trail does climb continuously, but by way of switchbacks at a moderate incline. The trail is smooth underfoot with very few roots or stones. Flowers are along the entire distance of three miles to the junction with the Thomas Divide Trail, so if some of the lower elevation flowers have gone by, you may see them at a higher elevation.

On April 9 at the very beginning of the trail a large patch of huge trout lilies and a couple of painted trilliums were noted. On April 16 the trout lilies were gone but the painted trilliums had increased to a half dozen or so. Numerous violets (purple, white, and yellow), yellow mandarin, purple meadow parsnip, blue cohosh, star chickweed, and Solomon's plume (in bud) bordered the trail. Showy orchids, large-flowered bellwort, wild oats, yellow and red trillium, dwarf ginseng, squirrel corn, dutchman's breeches, and trailing arbutus also were along the trailside, but all of these were overshadowed by the numerous slopes covered with large white Trillium grandiflorum. On April 16 some of the lower slopes of trillium were beginning to turn pink, but the upper slopes were at or near their peak. Kanati Fork, a branch of the Little River, is visible below the first part of the trail and as you go up through a lush forest you cross small branches of Kanati Fork. Each of these stream crossings was covered in lettuce saxifrage. Because of the elevation gain and the abundance of flowers this trail provides the wild flower enthusiast with outstanding displays for all of April and the first part of May. Turk's cap lilies and black cohosh were coming up and were abundant, so it should be good in summer, too. Give it a try!! ERIKA S. PARMI

#### SNOWBIRD TRIP

My guest was impressed, not only with the variety of spring flowers, but with the hospitality and friendliness of the Botanical Club members. The many birds at the new feeders at the Lodge almost made as colorful a display as the flowers.

# A REMINDER TO ALL LEADERS AND RECORDERS

If you are unable to fulfill your obligation it is your responsibility to find a substitute and to inform the remaining leader of this substitution. Also, the first-named leader should include the co-leader and the recorder on his/her scouting trip, if at all possible.

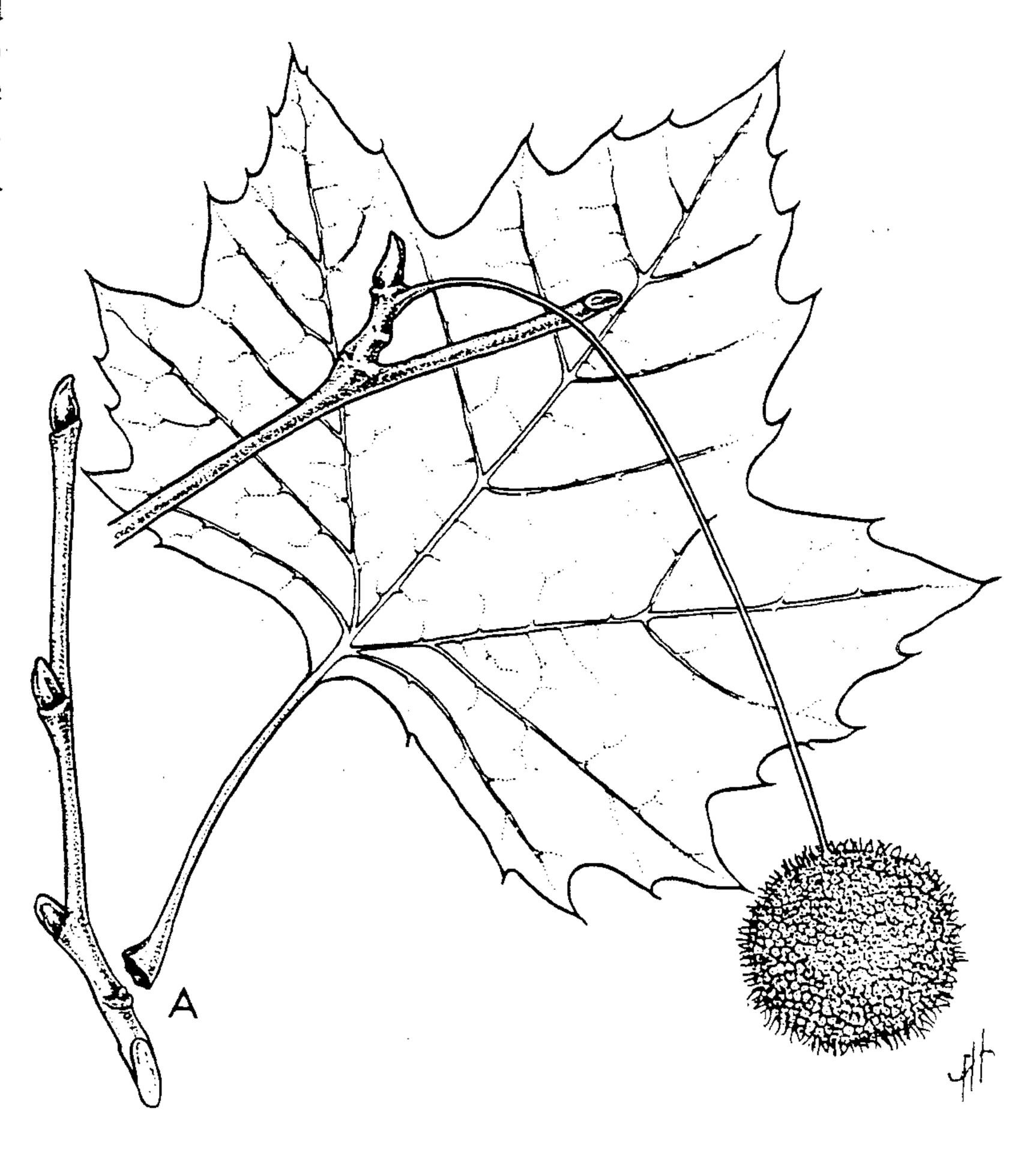
Erika Parmi

# FUREST TREES.....ALINE HANSENS

The American Sycamore, Platanus occidentalis, commonly known as the buttonball or more correctly, plane tree, belongs to the family Platanaceae, and is the most important of the 6 or 7 species native to the U.S., Mexico, and Central America and one, Platanus orientalis, native southwestern Asia. Once worldwide in range, the plane tree family can be traced through geologic evidence to remote times.

Platanus is the classical genus name of the Asiatic plane tree while P. occidentalis, meaning western, records the sycamore as belonging to the western world and distinctly American. Found throughout most of the eastern half of the U.S., the sycamore commonly grows along streams and in rich bottom lands where its smooth variegated bark is a familiar sight. This tree may reach a height of 75' to 140' where conditions are favorable and attains the most massive proportions of any American hardwood in the east.

# AMERICAN SYCAMORE



Most easily recognized are the young to moderately old trees in which large thin plates of bark peel off the trunk exposing whitish to yellowish inner bark. This is probably due to the inability of the bark to stretch as the trunk expands. The alternate, broadly ovate leaves are fastened by long petioles with a hollow base which fit snugly over next years bud. (see figure A).

Inconspicuous male and female flowers are borne on the same tree and appear with the leaves in early May. The dark red male flowers arise in the leaf axils while the light green pistillate or female flowers occur at the tips of the twigs and form closely packed ball-like heads. By October these become dense balls that dangle through the winter on long slender stems and eventually break up into many hairy, one-seeded nutlets. The seeds are abundant but germinate only in favorable moist conditions.

Bob Gunn asks in this SHORTIA if anyone noticed the ragged looking sycamores this spring. I am told this could be frost damage or, more likely, is sycamore anthracnose, a fungus disease that occurs only as the new leaves appear, causing them to blacken and drop. However, the tree puts out another crop of leaves and usually is unharmed.

#### 

I recently happened on a strange plant the likes of which I had not seen before. An herb, about a foot high, with two pairs of opposite, simple, entire leaves and one terminal flower well past bloom. MUCH to my surprise, it was a clematis, Clematatis ochroleuca or curly heads. How inconsistant! The familiar members of this genus, C. viorna (leather flower), C. virginiana, (virgin's bower) and the cultivated clematis in our gardens, are all vines with compound leaves and axillary flowers.

I know, I know, it's the flower that counts. All classification is based solely on the characteristics of the flower, but common sense--no, common ignorance -- leads one to expect at least some measure of similarity in the vegetative forms of plants as closely related as the same genus.

Mulling over this gross misfit prompted me to take a close look at the family to which it belongs——Ranunculaceae. Buttercups belong and so do anemones and hepaticas. But what about meadow rue (Thalictrum) and tassel rue (Trautvetteria)? Strange bedfellows with buttercups! These two genera, however, illustrate clearly one of the elements that is shared by most members of the family, numerous stamens and pistils. Look closely at the next meadow rue that you meet.

Now with that clue to relationship in mind, look closely at three very different flowers vaguely similar to each other but totally different from buttercups. Columbine (Aquilegia), larkspur (Delphinium), and monkshood (Aconitum) display much more complicated architecture but you find numerous stamens. And when you look at black snakeroot (Cimicifuga) you are looking at nothing but stamens! What a show they make.

Not every flower with numerous stamens is in the buttercup family, of course, nor does every member of the family have numerous stamens. The "odd" member with which we are familiar is yellowroot (Xanthorrhiza). which has five to ten stamens. Curious, too, that this is a shrub, -- all the others are herbs.

So what's the moral of the story? If you want to identify an unknown plant, work strictly with the flower. Don't be led astray by leaves, form, etc. After you succeed in naming the family and genus, take some time to enjoy getting acquainted with some of the close relatives and even some of the not so close kith and kin. It's a lot of fun -- and full of surprises.

#### WCBC FORUM

With you, I also salute ANNE ULINSKI in celebrating the Founder's Award of the Environmental and Conservation Organization of Henderson County! She is a tireless and well informed public servant and we often fail to recognize the valuable contributions made by such selfless good citizens.

--J. Dan Pittillo

### SOME EXCITING WILDFLOWER AREAS......ELAINE MONTGOMERY

Why were there so many showy orchis (<u>Galearis spectabilis</u>) blooming this year? We've seen a bumper crop at Snowbird, the Smokies, Holmes State Forest, and at Red River Gorge, KY at the Kentucky Native Plant Society (KNPS) Wildflower Week-end.

Several years ago I visited Red River Gorge in the Daniel Boone National Forest (east of Lexington, KY) having learned about the area from literature given to me by fellow WCBC member Bill Verduin. The gorge has the largest concentration of natural arches and rock shelters east of the Rockies. The 30 mile drive features overlooks and views of the arches as well as the National Wild and Scenic Red River at the bottom of the gorge. The 36 miles of trails which interlace the area give you a choice of short or long hikes to a variety of ecosystems. The KNPS has a Wildflower Weekend on the first weekend in May at the adjacent Natural Bridge State Park. About 20 different hikes are scheduled for botanists and naturalists plus two evening programs. The following hikes were especially noteworthy--the Whittleton Creek Trail (1 mile) to see yellow lady's slipper (Cypripedium calceolus pubescens), Rock Garden Trail (2+ miles) for a great mix of flowers and particularly the one mile section of Sheltower Trace Trail south of KY 715 along the Red River. Here park in the backpackers parking lot and walk to the bridge to see green dragon (Arisaema dracontium), delphinium (Delphinium tricorne), meehania (Meehania cordata) and syandra (Syandra hispidula) among others. Across the bridge is a great mix including Virginia bluebells (Mertensia virginica) and purple phacelia (Phacelia bipinnatifida).

For information on Daniel Boone NF call (606) 663-2852 or for National Bridge State Park call 1-800-325-1710.

## GETTING TO KNOW YOU......ALINE HANSENS

Ash, Joanne: RR#1, Box 260D, Hendersonville, NC 28792 (704) 625-8383. Moved here from FL and has lived in Bat Cave area about  $1\frac{1}{2}$  years. Initiated and was an active member of the FL chapter of the National Native Plant Soc. She is excited about the wild flowers in this area and at the moment her focus in on herbs.



Jones, Morgan & Elizabeth (Betty): 186 Johnson Rd., Brevard, NC 28712 (704) 884-3860. Moved here from Tampa, FL about 5 yrs. ago. Liked the climate and beauty of this area as well as a place to continue an avid interest in nature. Learned about WCBC from Dick & Jeanne, Smith.

McCurdy, Dale & Carol: 129 Ben Mar Lane, Hendersonville, NC 28791 (704) 891-2212. Moved here from IL 8 yrs. ago drawn by the ideal location and climate, as well as a place to continue strong interests in plants. Both volunteer at the Arboretum where they met Lois McDaniel who directed them to WCBC.

Morton, William & Juliette: 40 High Ridge Rd., Pisgah Forest, NC 28768. (704) 883-4903. Moved here from FL  $1\frac{1}{2}$  years ago. Both have an avid interest in plants and learned of the WCBC from member Edmund Farrar.

#### THE OLDEST LIVING PLANT INDIVIDUAL

A team of scientists at the University of Tasmania and the Parks and Wildlife Service, Tasmania, have announced the discovery of the oldest living plant individual known to date.

King's holly, <u>Lomatia tasmanica</u>, a member of the Proteaceae family, is known by only one population which is located in the World Heritage area of Southwest Tasmania, Australia. It is found growing along creek gullies in remnant rain-forest.

An isozyme analysis found the <u>Lomatia tasmanica</u> possessed zero genetic diversity, meaning that all the living plants of the species are exactly the same. <u>L. tasmanica</u> appears to be sterile (it flowers but never forms mature fruits) and this evidence strongly suggests that the entire species is a single clone.

A closely related species, <u>Lomatia tinctoria</u>, which also propagates vegetatively, had a normal level of genetic diversity.

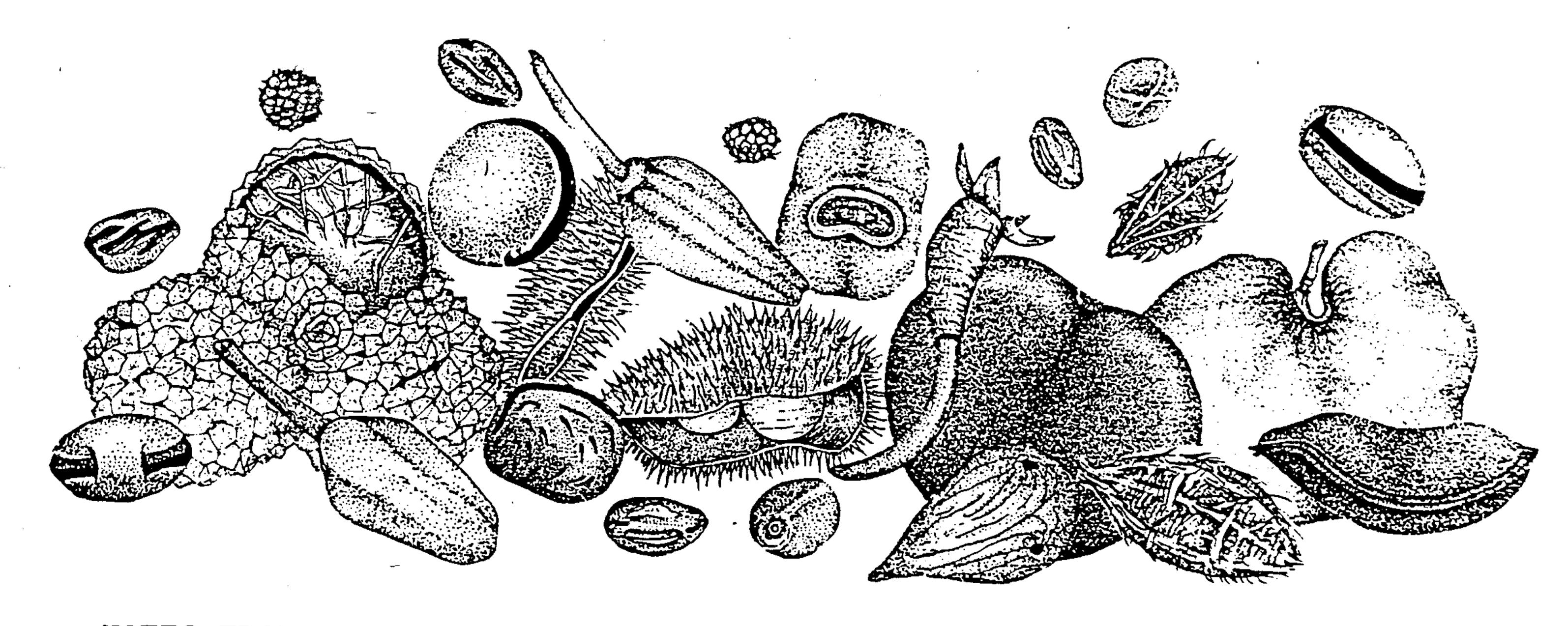
The <u>L. tasmanica</u> clone is the second longest in the world after the box-huckleberry clone (<u>Gaylussacia brachycera</u>) found in Pennsylvania. The scientists believe that a clone of the size of <u>L. tanmanica must be very old especially under the cold climate of Southwest Tasmania where vegetative propagation is likely to be very slow.</u>

Fossil leaf fragments identical to living L. tasmanica have been found within 8.5 km of the extant population. They have a 14C age of 43,600 years thus becoming the oldest living plant individual known to date. Box huckleberry was aged at 13,000 years by Wherry in 1972. The oldest living tree is believed to be the bristle cone pine (Pinus aristata) in Arizona which has been dated at 4,700 years.

--The above is excerpted from an article by Dr. A. Ceska of Victoria, B.C. Canada and appeared in BEN BOTANICAL ELECTRONIC NEWS ISSN 1188-603X, No. 149 November 8, 1996 aseska@freenet, victoriabc.ca Victoria B.C. -Anne Ulinski

#### WCBC FORUM ---

Margaret Byrd is a good observer. Her description of the mystery flower is one that is often seen but not well known in the popular books because it just is not quite the showy flower that Clinton; s lily (Clintonia umbellata or C. borealis) or even the Flowering onion (Allium cernuum) are. Undoubtedly she has found Hellebore (Melanthium parviflorum [Michx.] Wats. or what Radford et al. give as Veratrum parviflorum Michx.). Sometimes amateurs ask about the White hellebore (V. viride), but this one is much more restricted to higher elevations and either in grassy balds or seeps in the woods. The pleated feature of the blades for these two is similar but Melanthium has long petioles.



Spring in Deerlake has brought some interesting and rare plants (for us) along White Squirrel Lane: Shiny-leaved Bellwort (Uvularia pudica), Adam-and-Eve Orchid or Puttyroot (Aplectrum hyemale), Cockspur Thorn (Crataegus crus-galli). and another colony of False-Indigo (Amorpha fruticosa). All are under "protection". Another oddity, a Yellow-flowered Yarrow (Achillea millifolium), is growing in a weedy lot along Deerlake Road. The plant itself is not weedy, but I can only wonder about its history. I also am wondering if you have noticed how ragged the sycamores looked this spring?

Betty and I were sorry to miss this year's WCBC picnic, but we were staying over night in the beautiful town of Summerville, SC, on our way to Savannah, GA for the combined meeting of the Society of Commercial Seed Technologists and The Association of Official Seed Analysts. They have been meeting for over 75 years. My Coco-de-mer talk brought together about 200 attendees. At the last meeting I attended in Annapolis, MD, 1992, I set an attendance record when over 400 heard my USDA/ARS symposium.

In 1950 I was the youngest member ever to join the SCST; then I became an AOSA member before starting my career at the USA/ARS U.S. National Seed Herbarium. And now, alas, I was one of the oldest to attend the Savannah meeting. I have every intention in 2000 to celebrate my 50th year by attending the Ames, IA meeting.

#### WCBC FORUM ---

It is with mixed emotions that I received your announcement that Dick Smith was discontinuing his SHORTIA "Look Again" feature. I fully appreciate the fact that he is due for a break, but his insight into the variations between confusing species is much appreciated by many of us, professionals as well as amateurs. Members of the Southern Appalachian Botanical Society are also appreciating his contributions and the willingness of Western Carolina Botanical Club to allow us to reprint those features. Perhaps those of your members who missed his clearly stated ways to differentiate closely related species will want to watch for them in future CHINQUAPIN newsletters.

-- J. Dan Pittillo, CHINQUAPIN Editor

#### SHORTIA

<u>VOL. XIX, No. 3.</u>

AUTUMN 1997

A QUARTERLY PUBLICATION OF THE WESTERN CAROLINA BOTANICAL CLUB.

Editors: Elton J and Aline Hansens Distribution: Ruth Hoerich Please submit articles, "Members Comments", notes, etc. for the next issue by November 10 to Aline Hansens, 125 Far Horizons Lane, Asheville, NC 28803.

Add this name to your 1997 WCBC Membership List: Taylor, Sarah Gen. Del., Cedar Mtn. NC 28718.

SHORTIA c/o Ruth Hoerich 215 Newport Road Hendersonville, NC 28739

FIRST CLASS