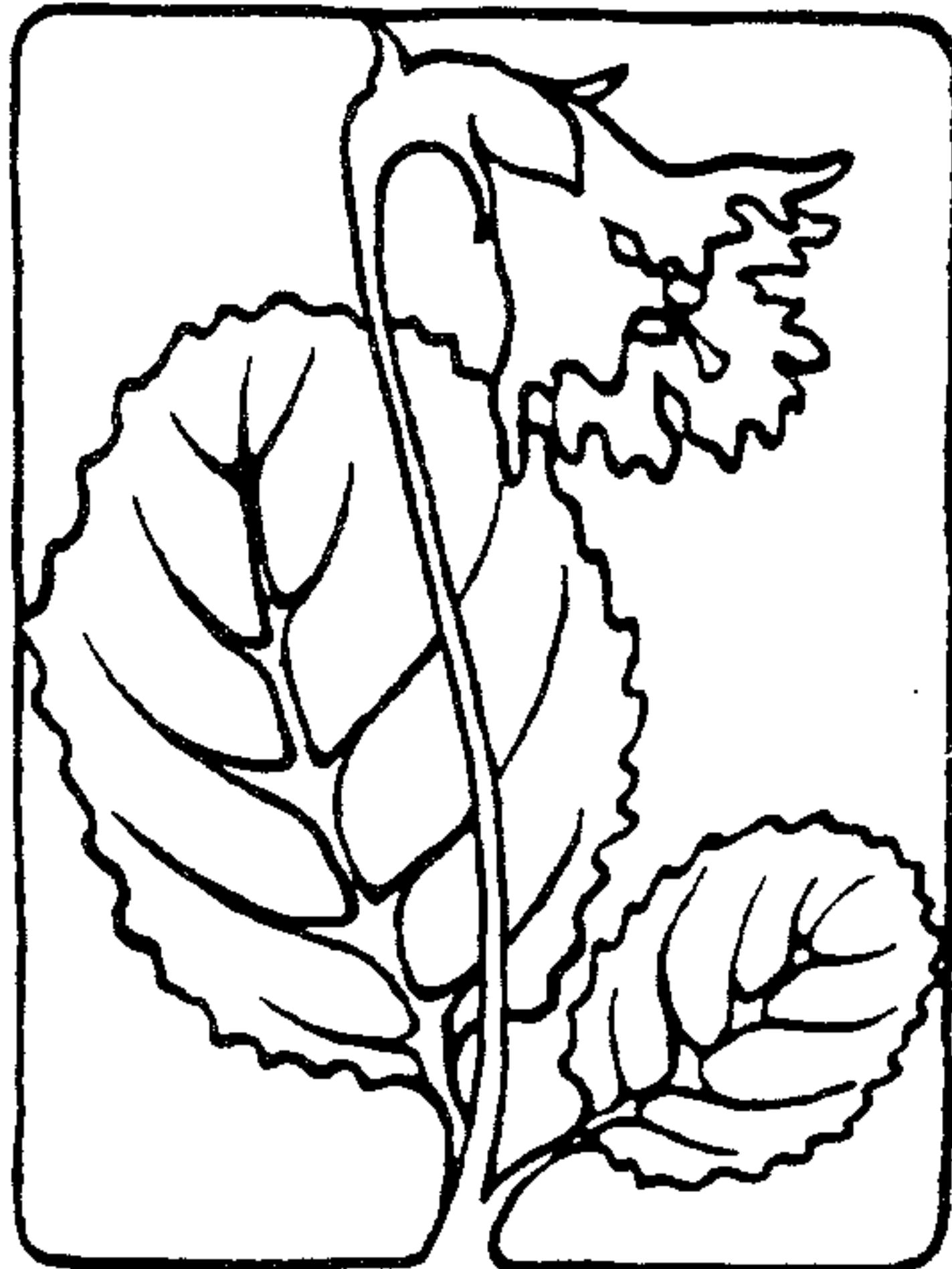


SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB

AUTUMN 1998



ELTON and ALINE HANSENS
Editors

WESTERN CAROLINA BOTANICAL CLUB - 1998

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FROM THE PRESIDENT.....DON HERRMAN

I believe the weather has changed. From the picnic at Ramblewood to Holmes State Forest and the Parkway it has been clear and comfortable --- may it stay that way. At the Bear Pen picnic area we were all crowded around one table for warmth when it started to rain. That did curtail our activities, an exception I hope.

There was a good, interested and relaxed group here at Ramblewood for the picnic. Most items have been returned. I still have a spoon and a couple pot holders. The star of the botanizing that day was the striped wintergreen discovered at an earlier date while mowing. Eating and botanizing make a great combination. Maybe we should do more of it.

A success story in the meadow--the meadow beauty has made its appearance. Not only on the fringes (as last year) but along the edges of the creek. I also found a few in the center of the meadow. Although the mosses keep spreading, the spring and summer flowers keep coming back.

As fall approaches there will be another scheduling session. All members are invited to send in suggestions for new and different outings. If you would like to attend a planning meeting, please let me know. Another way to participate is to send your thoughts to the Editors of Shortia. They are anxious for your help. Thank you!!

PLEASE NOTE: on the 1998 Membership List in the Officers for 1998 ANNE MATTHES is the Historian, not Tillie Mathis as listed.

GETTING TO KNOW YOU.....ALINE HANSENS

Center, Dan & Barbara: Box 303, Scaly Mountain, NC 28775, 1-(706)-746-2759. Winter Address: 2419 S. Carolina Ave., Tampa FL 33629. Live in NC Apr.-Oct. Interested in plants as a hobby. Learned of WCBC from Bonnie Arbuckle.

Prescott, Lionel & Saretta: 949 Everett Rd., Pisgah Forest, NC 28768 (828) 877-4859. Winter Address 3930 N.W. 29th Lane, Gainesville, FL 32606 (352) 376-0994 Live in NC Apr. to Nov, Both have an interest in science and plants. Lionel has a PhD in Botany, his field being physiology and chemistry of plants. Learned of WCBC from Jeanne Smith.



RECORDER'S REPORT FEBRUARY - JULY 1998.....ERIKA PARMİ

An early wet, spring followed by a cold snap developed into a hot, dry summer. Most wild flowers bloomed earlier than usual. It has been a strange season with turk's lily out in early July along the high elevations of the Parkway, and fly poison already at the green stage of bloom at the same time. We are lucky to live in the mountains where the nation-wide heat wave has been milder than in central Texas where they had more than 25 days of daytime temperatures above 100° and nighttime temperatures above 80°.

On the spring trips to the parkway it was evident that something was defoliating the trees -- especially oak, along with some maple, beech and hickory. The guilty "varmint" was the fall (yes, that's right) cankerworm (Alsophila pometaria) according to the Parkway summer information handout.

I was away for the early spring field trips, two of which were canceled (March 20 - Holmes and April 3 - S. Pacolet River). I returned in time to enjoy the SC Glassy Mountain trip on April 13. It was a stunning display, but not quite as colorful as last year on April 11 when elfin orpine was in full bloom turning the rock surfaces to fire. The Appalachian sandwort, however, was at the peak of its bloom.

The Kanati Fork trip on April 20 to the Great Smoky Mountains NP drew only 8 participants. It was a glorious spring day and all 8 did not want the day to end, so we hiked the Nature Trail loop at the Chimneys. This trail was extremely wet and had turned into a mountain stream in some areas.

The Craggy Gardens on May 4 (earlier than in previous years) presented spectacular displays of spring beauty along the roadsides. Purple fringed orchis was also found. The May 8 trip to Coleman Boundry Road was a victim of our wet spring. The leaders had a wonderful scouting trip early in the week, but on May 7 most of the lower and mid-sections of the road were pelted by hailstones which shredded most of the plants. In spite of this 76 species were seen in bloom. The upper area and the trail to Douglas Falls were not damaged.

Thank you Allen and Naomi Kurinsky for a wonderful day at your wild flower garden on May 11. We saw about 50 species in bloom. Also thanks for the wonderful dessert treats and the drinks you provided at lunch.

The May 15 trip to Tanbark Tunnel was canceled; the leaders were unable to attend. The Blue Ridge South and Buck Springs Nature Trail trips were on May 18 and 22 with pleasant weather and great flowers. The June 5 outing at Byrd's farm was canceled because of rain. The June 12 picnic, however, at Don Herrman's was on a sunny, hot day with a cool breeze blowing across Don's hilltop. A short flower hike was taken by 17 members after which all 35 enjoyed a wonderful buffet.

The June 19 trip to Craggy Gardens was quickly changed to a Bee Tree Gap trip when participants were greeted by cold, winds and fog. They briefly botanized the edges of the parking lot and the beginning of the trail before heading to the lower elevations of the Craggy Gardens picnic area. Before lunch was over it began to rain, so everyone headed for home and warmer temperatures.

The Grassy Ridge Mine Overlook trip on June 26 was a stand-out with 70 species found. Among them were two flowers we seldom see, forked catch-fly (Silene dichotoma) and tassel rue (Trautvetteria carolinensis). They also saw turk's cap lilies in bloom which is very early for this species.

The walk on the lower loop of Holmes State Forest on July 10 was an education in fruits and seeds; most of the plants along this trail through the forest flower in the spring. The meadow at Haywood Gap on July 17 was somewhat disappointing. Fly poison blooms had already changed from white to green. Many of the blueberry and other shrubs are beginning to take over the wildflower slope. On the other hand Bee Tree Gap, on July 24 was its usual spectacular self. At this time in July the phlox is usually at its peak, but this year the coreopsis and brown-eyed susans took over and turned the meadow to gold. The nodding onion also was a stand-out. The July 31 trip to the NC Arboretum was held under threatening skies. No one got wet and the group was rewarded with a couple of seldom seen species -- yellow-fringed orchis and bunchflower (Melanthium virginicum).

As we head into the fall flower season it will be interesting to see how the hot weather has affected the flowers both in terms of numbers and beauty.

BOOK REVIEW by MARY ELLEN LINDLEY

In case you haven't heard, another one of our own has written a new book. MOUNTAIN YEAR is Barbara Hallowell's latest.

An easy going year round nature ramble in our familiar mountains. It opens windows a crack on all manner of things seen, overlooked, wondered about. From vultures to slime molds, bits of information emerge to engage and challenge the reader. Descriptions and processes are presented simply and with a minimum of scientific vocabulary.

Written with a light touch and enhanced by clear, sometimes whimsical, color photographs, it invites the general reader but seems made to order for newcomers beginning to explore the mountains. Leaders of "youth nature groups" should also find it a helpful resource, with its full index and unobtrusive cross references and bibliography.

To Barbara's many friends in the Western WCBC, in whose formation she played a key role, this type of book comes as no surprise. Members know full well her eager questing spirit on the trail and off.



One of my father's many hobbies was the hybridizing of bearded (German) irises. Although I could not appreciate the patience with which he waited for the years to pass until he could see what he had wrought, when the time came I was always impressed--especially when he had been able to produce a new and unusual color.

I was aware that the name "iris" was Greek for "rainbow" and was given to this flower because it seemed to come in just about every imaginable hue. Inevitably this led me to ask why he never tried for a pure red one. His response was to say that it would be futile, for Nature seems to have decreed that any given flower might have two of the primary colors but never a third. Thus, he explained, there can be blue irises and yellow irises but never a true red one--nor, for that matter, a blue rose or a yellow morning glory. Asked why this was so, he merely shrugged, but I was pretty sure that if it was written anywhere he probably would have managed to find it.

Decades later, I posed this question to a group of Club members at a Learn-and-Share session hosted by Nan Morrow, but still failed to elicit an explanation. We had a lively discussion, but mostly it centered around the definition of a primary color, with the scarcely concealed objective of discrediting the premise itself, thereby making the problem disappear.

Now it has popped up again in, of all places, that virtuoso of newspapers, the *Christian Science Monitor*, which has a new department for readers who are looking for answers to perplexing questions. Their reply to one Ed Cook: "We are raising the white flag on this one. We talked to botanists at Harvard University, Boston University, Boston College, and even tracked down a specialist in India, but no one could help. If you know the answer, please let us in on it."

The *Monitor* is anxiously waiting to hear from a member of the Western Carolina Botanical Club at "The Readers Ask", c/o The Home Forum, One Norway Street, Boston, MA 02115. And by all means share a copy of your letter with the Editors of *Shortia*!

COMFORT ON THE TRAIL on a botany trip depends on our actions and attitudes toward the pests that confound us. Fortunately, we usually hike in mountain areas which present few pest problems,---black flies in spring where rapidly running streams exist, sometimes mosquitoes, and occasionally ticks (though we rarely see them until we return home and find them on our person). Now and then other blood-sucking flies annoy us. Few people know that we can avoid much insect annoyance simply by wearing white or yellow clothing and avoiding navy blue, dark reds and black. Bees and wasps will visit us more often if we dress like a flower or improve ourselves by smelling like a rose. Be aware of your color and aroma.

BOOK REVIEW.....CHARLES R. GUNN

WILD FLOWERS OF THE SOUTHERN MOUNTAINS, RICHARD M. (DICK) SMITH

1998. University of Tennessee Press. Knoxville, TN (262 pp., 600 colored photographs by author, pictorial key, glossary, bibliography, index. ISBN 0-87049-992-0. Library of Congress Number OK122.3.S55).

Dick is a noted and published botanist whose knowledge of Smoky Mountain plants is legion. This book, printed in Italy contains 600 colored photographs that Dick personally took for this book. It is surprising to note that all of the flower and plant photographs are in sharp focus, well-lighted, and nicely framed. Dick's photographs have brought the flowering plants of our area into our homes.

One-half of the species covered in the book are shown in color. At least one species in each genus is included. Each species has the following treatment in the catalog: Scientific name, synonym when needed, common name when available and/or flower, its habitat and its phenology. While some of the entries are more comprehensive than others, all contain the essential information for field identification. Be sure to read and reflect on the "asides" that are sprinkled throughout the catalog. These notes are bonuses for the reader, and cover the history or uses of selected species.

A unique, pictorial-floral key focuses the reader's attention on the petals: their shape, color, number, and organization. This user-friendly key as well as the keys and summaries within the catalog refer the reader to the correct place in the catalog. And this leads to the magnificent plates.

My highest recommendation! The very best Southern Appalachian wildflower book. Support your local book store and our local botanical author. The book is \$26.45, including tax.

THE GIANT AND THE PYGMY.....ELTON HANSENS

The Giant was more properly called Lactuca canadensis or wild lettuce and the Pygmy was technically Diodia teres or buttonweed. As we walked the trail our attention was drawn to a towering plant, now with hundreds of seed heads smaller but similar to those of dandelion. A few flower heads still adorned the plant. We were so taken with the plant that we returned with a measuring tape another day and determined that the giant had grown to 13 ft. in this single season.

The discovery of the pygmy, on the other hand was accidental when one of us glanced down and saw pink flowers 1/4 inch long on a small somewhat sprawling plant. It was easily identified as buttonweed.

The black walnut, *Juglans nigra*, is a rapid growing American hardwood; an introduced tree in this area but likely to become fully naturalized. It thrives in deep rich moist soils and is found over much of the eastern United States but is somewhat less common in the mountains of North Carolina where it is known to occur up to 3800 ft. In size it may reach 100 ft. or more with a diameter of 2 to 3 ft. It grows singly or in small groups.

The black walnut belongs to the family Juglandaceae along with its close relative, the butternut or white walnut which is less common in this area. The latin name *Juglans* is a contraction of *Jovis glans* which refers to the nut or acorn of Jupiter. *Nigra* refers to the black bark, rich brown wood or shell of the nut. The Indians in central NY called it "dent-soo-hwa-no-ne" or round nut.

The dark green compound leaves are alternate and nearly two feet long with 15 to 23 oval toothed, long pointed leaflets which turn a clear bright yellow in the fall.

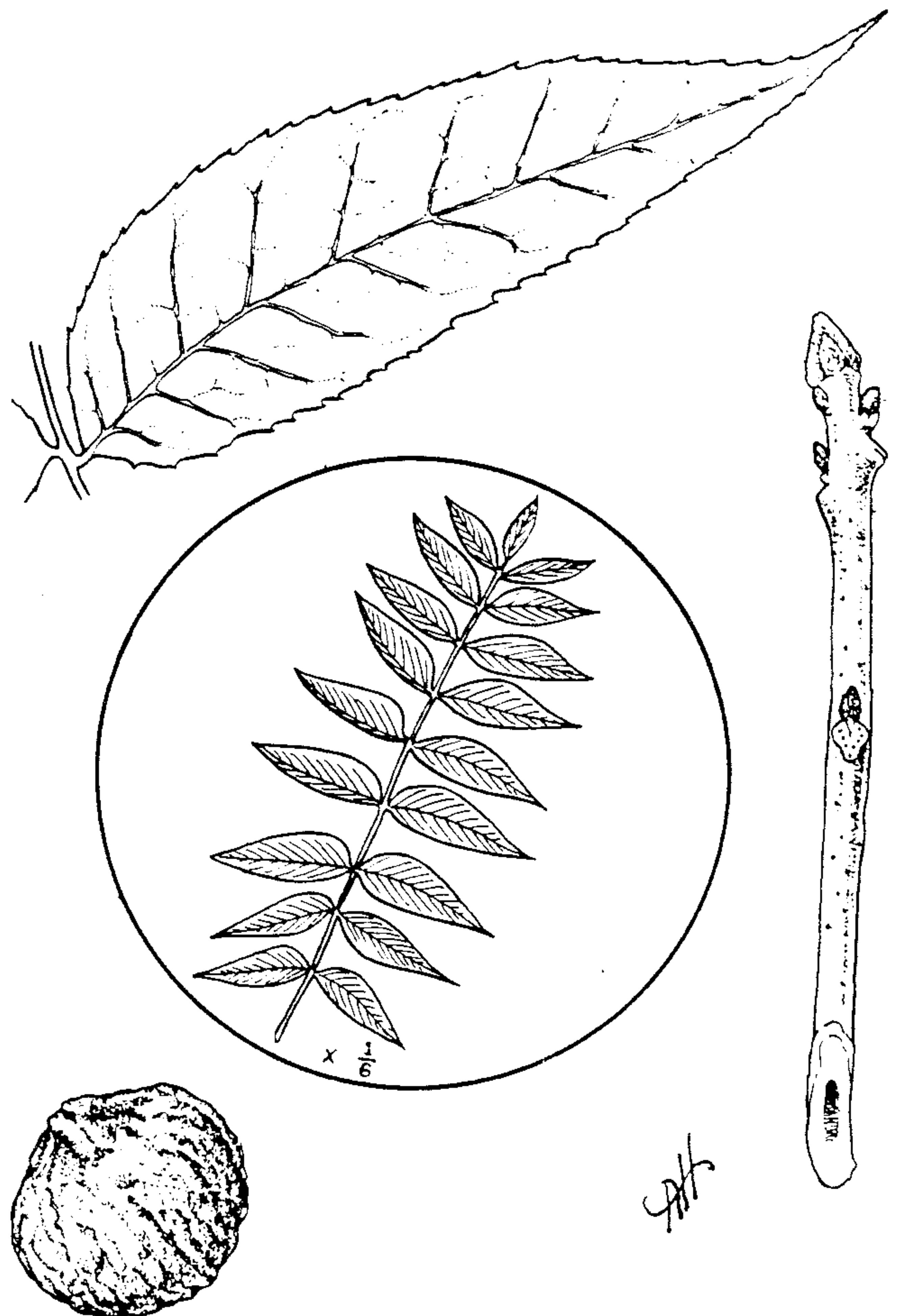
The flowers, both staminate and pistillate, appear on the same tree during April or May. The staminate, formed on the previous years growth and the pistillate, in groups of 2 to 5 catkins, on the ends of the new growth about the time the leaves are half grown.

The fruit matures during September and October and is a dark brown, hard, woody nut covered with a thick yellow-green fibrous husk. The sweet, edible nut meats are prized by squirrels and the distinctive flavor is a taste treat for many people.

In the winter black walnut is distinguished by its dark, deeply grooved bark, stout twigs and large gray downy terminal buds.

The black walnut has soft, brown, easily-worked wood that is stronger than white oak. It has been used since earliest American history for fine furniture and ranks as America's foremost cabinet wood.

BLACK WALNUT



THE BLACK LOCUST SUFFERS.....ELTON HANSENS

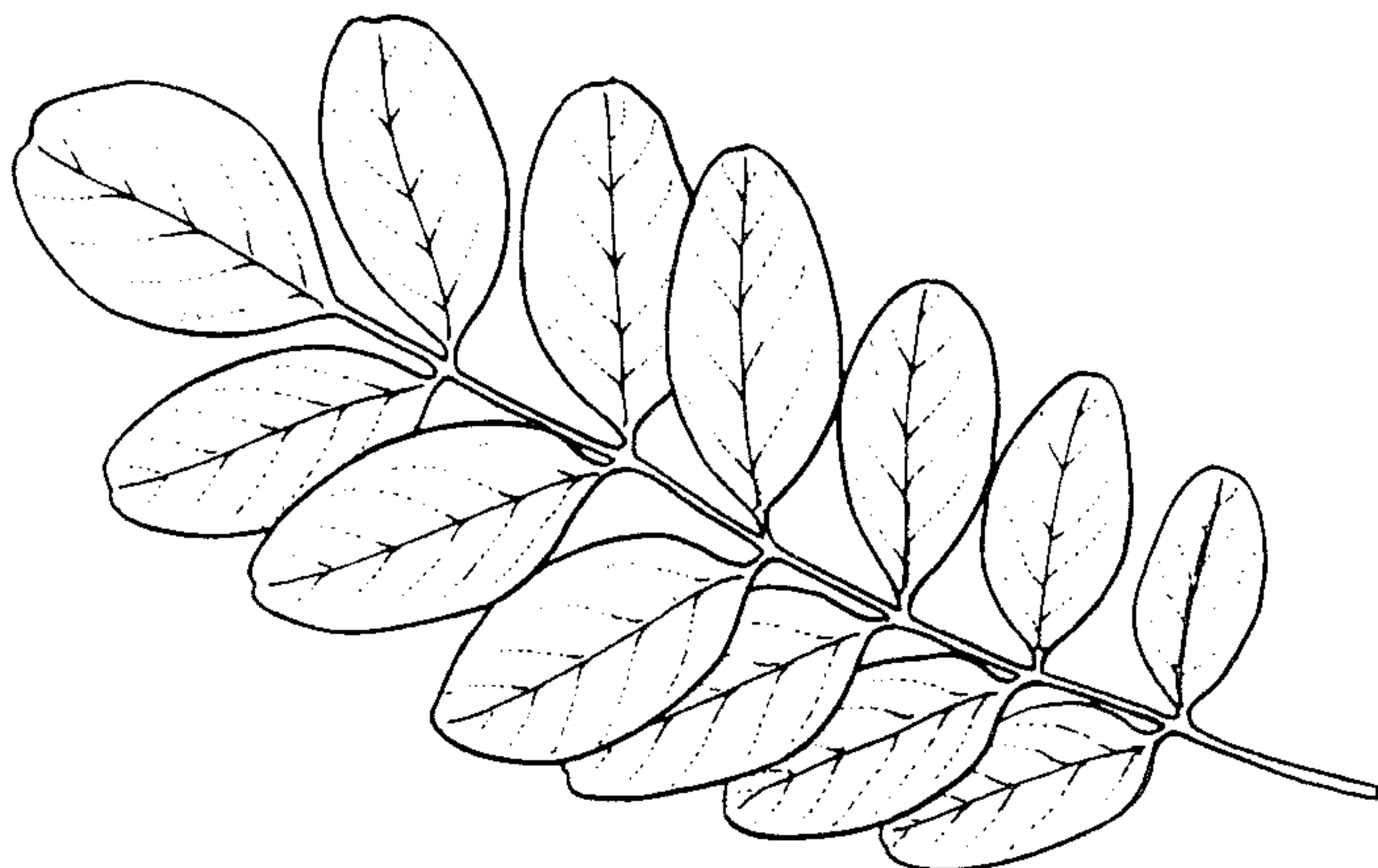
Black locust trees have been receiving considerable attention by concerned members of our Club. Over large areas mature trees look like they have been exposed to a blow torch and stand out in the forest. There is concern that many trees are dying or at least suffering greatly. On virtually all of these trees some new leaves have been produced as the season has progressed. This is not the first time that black locust has suffered such damage.

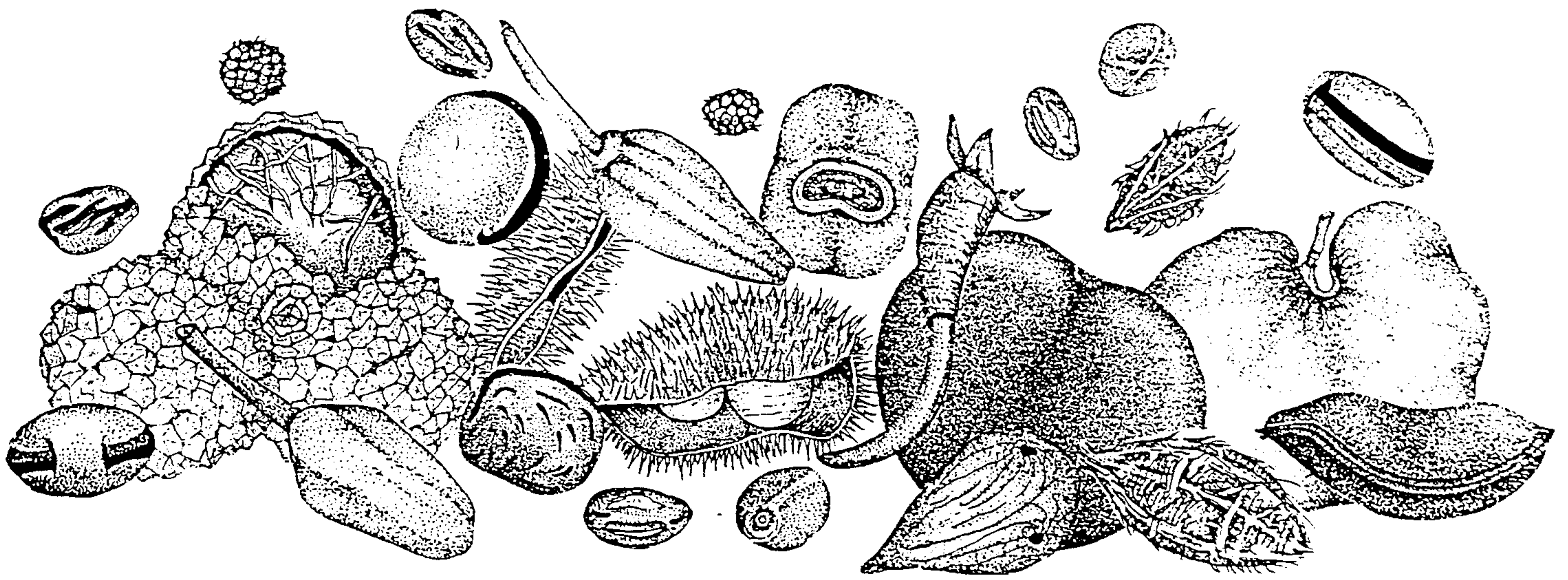
On page 91 of Arthur Stupka's Trees, Shrubs, and Woody Vines of Great Smoky National Park. (Univ. Tenn. Press) we find, "For a number of years prior to the record-breaking cold weather of February 1958 (when the minimum temperature on the mornings of Feb. 17, 18, and 19 was 11, 13, and 9 degrees respectively) the black locusts in the park and vicinity were plagued by a small beetle, the larvae of which subsisted on the chlorophyll in the leaves. So abundant were these insects that mountainsides where black locusts prevailed turned brown in early summer. Since this extensive infestation was not apparent after 1957, it is assumed that the low temperatures in February 1958 proved to be a natural control of these beetles."

These beetles seem to be a major problem today, so let's look a little further at the beetle. Borror and DeLong in An Introduction to the Study of Insects, p.342 present these facts succinctly---"Leaf-mining leaf beetles are 4-7 mm in length, elongate, and peculiarly ridged. Most of them are leaf-mining in the larval stage, and some are rather serious pests. Xenochalepus dorsalis (Thunberg), an orange-yellow beetle with a broad black stripe down the middle of the back, is a serious pest of black locust. Its mines are oval or irregular areas in the leaves. A tree may be defoliated when these insects are numerous."

There is no question that these leaf-mining beetles are working against black locust trees in our area but we can also say, "There are other factors involved that are not well understood". I learned this statement from a professor who frequently ended a lecture with these words.

I think the large population of Xenochalepus dorsalis will crash one of these years and the severe problem will disappear.





NOTES FROM WHITE SQUIRREL.....CHARLES R. GUNN

Betty and I spent a long weekend in Greenbelt, MD. We had the opportunity to visit our old homes in Greenbelt and Annapolis as well as to visit the FDR memorial in Washington and some of the Smithsonian Museums. We both agree that the FDR memorial is impressive and well worth the trip to Washington.

On Monday I worked in the USDA/ARS seed herbarium on problems I was having with my newest project: Seed-fruit morphology at the family level. I was celebrating the first draft of the first 100 families to study.

The good news is that Joe Kirkbride informed me that our typescript covering the seed-fruit morphology of faboid legumes will be into the USDA editor about August 27. The typescript is over 2,000 pages. We also met Leslie who is preparing the glossary plates and is scanning all of the plates into a computer so that a CD-Rom disc can be distributed.

During July we found about one-half dozen new species for the Deerlake flora. But more about these discoveries in the next column.

ADD TO MEMBERSHIP LIST

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S H O R T I A

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Editors; Elton J and Aline Hansens Distribution; Ruth Hoerich

Please submit articles, "Members Comments". notes, etc. for the next issue by November 7 to Aline Hansens, 125 Far Horizons Lane Asheville, NC 28803.

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FIRST CLASS
