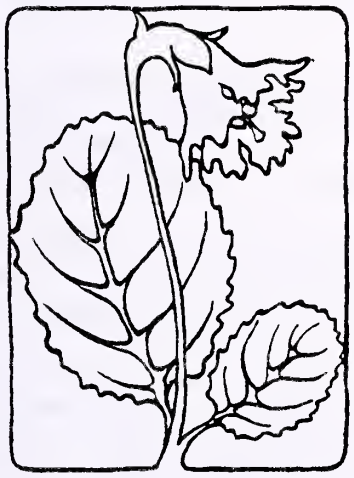
SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB

SPRING 1982



HELEN TURNER, Editor

PRESIDENT'S NOTE

The ever whirling wheele, Of Change,
The which all mortall things doth sway.

It seems appropriate to use this quotation from Spencer to preface the brief Note assigned to me. For with this issue we do have a change of Editor-ship for SHORTIA. We welcome the new Editor, Helen Turner.

At the same time we wish to wholeheartedly express our appreciation to Verna and Harvey Krause for their part in the successful launching of SHORTIA. So many things die "a-bornin" and, hence, we appreciate all that Harvey and Verna did in guiding SHORTIA through the early stages of its life, and bringing it successfully to its present stage. It is human to resist change, and we did all we could to convince them to continue their good work. Having failed in this, we say "Many, many thanks to both of you."

And to Helen, we all wish you the best and pledge to you our cooperation as you take over the Pilot's wheel.

August Kehr (on behalf of the WCBC)

BOOK REVIEW

FERN FINDER by Anne C. Hallowell and Barbara G. Hallowell. Published by Nature Study Guild, 1981.

Why is it that after someone has taken a difficult problem and presented a clear, simple solution we all say, "I wish I had thought of that"? So it is with this superb guide to ferns written by the Hallowells, mother and daughter. We are honored that Barbara is a member of WCBC.

If you were to use a conventional taxonomic guide on ferns, it would start:

(a) Leaves (fronds) broad, flat, and fern-like, more or less pinnately or ternately divided or entire (see b).

(b) Leaves narrow, small, and scale-like or larger, divided, and clover-like (see 3db)

Now if you are like me, you really would not know whether to go to b or 3db. As a result I never did learn my ferns. It was too difficult, a matter of frustrating decisions because the instructions themselves were indecisive.

The FERN FINDER, on the other hand, starts out with seven pages of interesting drawings, and never once must the user refer to any glossary or dictionary for the meaning of a word -- the drawings are self-explanatory. The user starts on page 8 and, by means of simple diagrams, can track through identifications of all ferns growing from Hudson's Bay south to Tennessee and North Carolina, and from the Atlantic Coast west to midsections of the U. S. and Canada. Nowhere in the 60 pages of text is there any terminology that one would not find in the local newspaper. One has only to procede from one readily understood drawing to the next, and it is so easy it is actually fun. By actual timing it took me 4 min. to identify one unknown fern. With the conventional guide it would have taken me far longer to decide whether to go from a to b or to 3db before giving up in utter frustration.

The FERN FINDER is indeed a guide for finding the names of ferns in an utterly simple, accurate, complete and fun-filled way. Congratulations, Anne and Barbara. I wish I had thought of it!

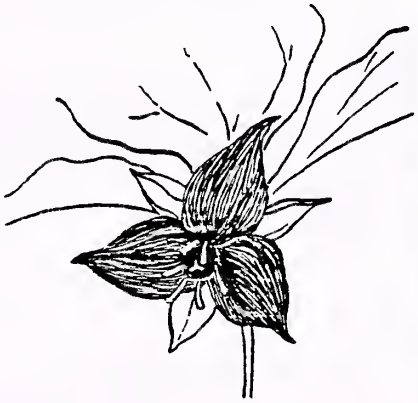
August Kehr

LOOK AGAIN !

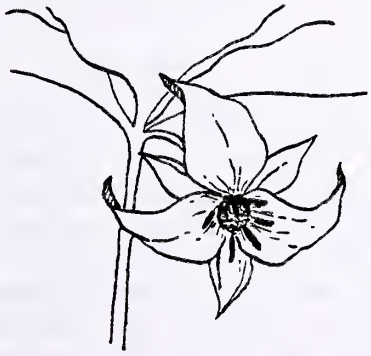
The trilliums constitute one of those genera in which aberrant plants, even monstrosities, are common. Some taxonomists have reduced a number of these to the status of varieties or forms, while others have tended to accord them the rank of full species.

A good example is Trillium erectum, popularly known by such names as Wakerobin, Purple Trillium, Birthroot, Brown Beth and, because it often has a rank odor, Stinking Benjamin and Wet-dog Trillium. If you ask anyone in the northeastern United States about it they probably will tell you that it has maroon flowers, but in the southern Appalachians so many of the plants have white ones that the name forma albiflorum was applied to them. (The most variable of all the trilliums, it also comes in pink, pale yellow and greenish white, but only rarely). Fortunately, there are some fairly constant characters which, in combination, serve to identify the species: The flower is held erect above the leaves (hence "erectum"), the petals do not overlap but spread apart from the base, and the ovary is maroon no matter what the color of the petals.

In the southern mountains - and nowhere else - we encounter Vasey's Trillium, often referred to as T. erectum var. vaseyi. Here we have a somewhat larger flower, nearly always maroon, differing from the typical species in that the flower hangs below the leaves and the wide petals do overlap. The stamens are longer and extend conspicuously beyond the pistil.



Then we have Nodding Trillium, usually identified as T. cernuum but sometimes regarded as still another variety of T. erectum. As in Vasey's Trillium, the peduncle is recurved to bring the flower beneath the leaves (again the name is helpful, "cernuum" denoting this pendent posture), but the petals are white or light pink and curve strongly backward. Moreover, the ovary is lavender, and the anthers (yellow in the others) are an unexpected purple.



Dick Smith

All Those Violets!

Primrose-leaved, long spurred, halberd-leaved, birdfoot, Canada, sweet white, smooth yellow, marsh blue---to the person who loves to tramp the coves and hills and fields and mountaintops, these are adjectives of spring, recognized as the descriptive common names of violets. Some violet species are abundant, some rare, some seem like tiny pansies, and some sport leaves with weird shapes, but all seem to have great appeal for spring wildflower hunters.

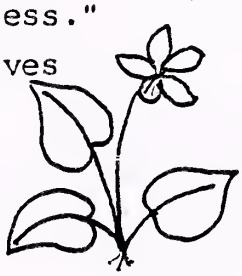
Our WNC mountains provide habitats for a wide variety of these little members of the genus Viola. A checklist of spring flowers of the Smokies lists 31 species. Maps in the Manual of the Vascular Flora of the Carolinas spot 17 species for Henderson County and, if updated, would list at least 19, so there's plenty of challenge!

Before considering differences which help identify a violet, let's look at the likenesses which lump these flowers together. Violas typically have 5 petals: 2 upper, 2 lateral, 1 lower, just like a pansy, which is really a jumbo-sized violet. Lateral petals are usually bearded, lower petals usually veined and extending back to form a spur. Sepals and stamens number 5 each, and the pistil is clublike.

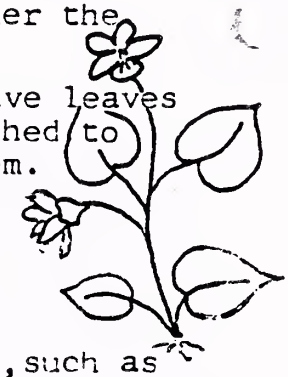
Violets hide a secret in their foliage. Deep under the leaves at the base of the plant, developing after the showy flowers finish blooming, are strange flowers that never open and are self-pollinated and seldom seen. Botantists describe these flower types with wonderful-sounding terms: chasmogamous flowers are the familiar, open, colorful, conspicuous ones, cleistogamous are the closed, secret ones. Only birdfoot violet of our WNC species is without the latter. "There is one in every crowd!"

A big step in identifying violet species is noting whether the plant is "stemmed" or "stemless."

Stemless plants have leaves and flowers arising on separate stalks.



Stemmed plants have leaves and flowers attached to an erect main stem.



Adding flower color to this, a good book, such as Newcomb's Wildflower Guide, identification of most species is fairly easy. Charting these two features for the Henderson County species helps, too. (See chart at end.)

How quickly all the factual material on identification can be tossed aside in that wonderful moment in early spring when we stoop to peer closely into the first cheery faces of roundleaved violets, their sunny spring yellow constrasting so strikingly against the heavy winter brown of the forest floor! During blooming time, their rounded leaves are barely beginning to unfold, but by summer they grow to surprizing size, to 4½", flattening out along the ground. We can momentarily ignore bearding and hairs or pistils and stamens when admiring the pristine beauty of the sweet white violet, which often stands "with its feet wet" as it grows in moist or wet places in deep shade. We need no vast technical vocabulary to appreciate fully the rich lavendar of the birdfoot violet or the lush foliage and tall-stemmed, dark-centered flower of the marsh violet, and anyone

can revel in a patch of sunny meadow purpled with common violets, set off by yellow mustard and dandelions.

And incidentally, violets are delicious to eat! Both flowers and leaves lend colorful excitement to a toss salad, and tender leaves cooked like spinach are loaded with vitamins. A wide variety of violet recipes can be found in books on edible wild plants. Try violet jello!*

With enough species to challenge but not enough to overwhelm, identifying our Henderson County violets is one of spring's most delightful rewards, but isn't the greatest reward just being in places where violets grow, from open fields to shaded streamsides, deep valleys to high mountains, rich woods to scrubby "waste" places?

Get ready! The violets are coming!

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* Violet jello

2 envelopes gelatin
1 cup cold water
2/3 cup sugar
1/4 tsp. salt
1 cup boiling water
1/2 cup lemon juice
1 cup violet flowers, blended with 1 cup cold water

Recipe from Eating Wild, a publication of the Massachusetts Audubon Society 1971.

Sprinkle gelatin onto cold water. Add sugar, salt, and boiling water; stir till dissolved. Add lemon juice and COOL till at least room temperature or cooler. (Heat kills flavor and color of violets.)

Add violets. Pour into mold or individual bowls. Chill till set. Sprinkle several flowers on top before serving.

Henderson County Violets

White, stemmed
- V. canadensis---Canada
- V. rafinesquii--Field pansy (kitaibeliana) (sometimes bluish)
- V. striata------Cream

White, stemless
- V. blanda-------- Sweet white
- V. pallens--Pale
- V. primulifolia-- Primrose-leaved

Yellow, stemmed
- V. hastata--- Halberd-leaved
- V. pensylvanica-- Smooth yellow
- V. tripartita---- 3-part leaved

Yellow, stemless
- V. rotundifolia-- round-leaved

Blue-violet, stemmed
- V. rostrata------ Long-spurred
- V. rafinesquii--- Field pansy (sometimes white)

Blue-violet stemless
- V. cucullata--Marsh
- V. emarginata--- Triangle-leaved
- V. fimbriatula-- Northern downy
- V. hirsutula---- Southern wood
- V. palmata------ Early blue
- V. papilionacea- Common blue
- V. pedata--Birdfoot
- V. triloba--Trilobed

B. Hallowell

FROM THE HISTORIANS' REPORTS

In 1981 the Club had 43 hikes and 13 indoor programs. The hikes were attended by 1092 people (average 29.4); indoor programs by 418 (average 32.15). We drove 2672 miles (average 62.14 miles per trip.).

Now think about the indoor programs, the hikes, the nice people you get to talk with, the thousands of flowers you see, the good exercise, how good the lunches taste, the places you visit that otherwise you would never see, the fresh air, the beautiful scenery seen from the tops of the mountains we reach, 2 schedules and 4 SHORTIA papers per year. All this for a cost of 3.5¢ each. Can you believe that you can get so much for so little? John F. Kuhn (Historian Emeritus)

Despite ice, snow, rain and gloom, the WCBC has made an auspicious start on the new year. On January 8, Dick Smith gave a most carefully researched talk on the pioneer botanists (Asa Gray, Mark Catesby, Micheaux, Memminger and others) who came to this area in the 17th and 18th centuries. He illustrated it with very beautiful slides.

The Annual Meeting on January 25 was held in the Parish House of St. John's in the Wilderness Church. Mary Lou and Augie Kehr brought pine boughs, berries and poinsettias which made the tables look festive. The covered dish luncheon provided sustenance and the companionship so valued by this group. The officers elected for 1982 are: President August Kehr; Vice President Sam Childs; Secretary Margaret Canfield; Treasurer Margaret Kuhn; Historian Louise Foresman.

On February 5, a workshop on propagation of woody and herbaceous plants was presented by Augie Kehr at his home. Twenty nine persons, folding chairs and cuttings in hand, arrived and were most interested in the methods and variety of materials used in starting new plants.

Sam Childs, John Kuhn, Margaret Canfield, Harry Logan, Dick Smith, Peggy Camenzind, Bruce Leech, Barbara Hallowell, Louise Foresman and Augie Kehr met and have provided us with a varied and interesting schedule for this Spring and Summer.

On February 12, Chuck Snow, assisted by Tom Hallowell, Jim Maddox, John Townsend and Phil Babcock, presented "Beyond 6000" -- a look into the experiences of the WCBC members who have climbed the 40 peaks in this area with elevations above 6000 feet. The talk and descriptive slides and later questions and answers were enlightening and interesting.

Dick Smith was back on February 19 with a clear presentation and superb slides of the large and varied "Heath Family" as found in this area, the tundra country of Norway, the Colorado Rockies, northern Canada. The presentation was video-taped by a professor from Blue Ridge Tech for use in his classes -- the first such taping at our meetings. Louise Foresman (Historian)

The WCBC voted at the Annual Meeting to contribute $50.00 to each of the following organizations: University Botanical Gardens in Asheville, Nature Conservancy, Southern Appalachian Highlands Conservancy.

WHAT TO SEE

Loveliest of trees, the cherry now
Is hung with bloom along the bough
And stands about the woodland ride
Wearing white for Eastertide.

Now, of my threescore years and ten,
Twenty will not come again,
And take from seventy springs a score
It only leaves me fifty more.

And since to look at things in bloom
Fifty springs are little room,
About the woodlands I will go
To see the cherry hung with snow.

From "A Shropshire Lad" by A. E. Housman

The "cherry hung with snow" is in England, but we have many flowering trees that beautify our woods in the Spring. The first to bloom, for which we all watch, is serviceberry. When we see its white blossoms, high on the side of the mountains, we are reminded of the pioneer days, when the preacher, seeing them, knew it was time to go up into the remote settlements to conduct "sarvices."

The most loved and most widespread of the white-flowered trees is, of course, the dogwood. Others are more limited in habitat but all invite us to go "about the woodlands." Here are a few -- an area where the Club has seen each -- and the time of blooming.

Helen Turner

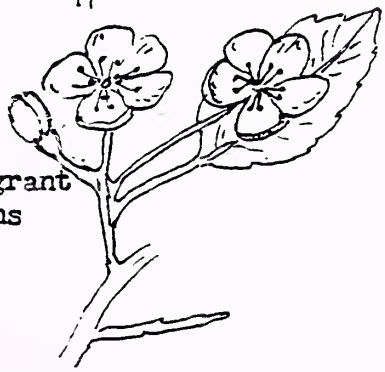
Serviceberry
Amelanchier arborea
Widespread
March - April

Hawthorn
Crataegus sp.
Stout, sharp thorns
Barnardsville
April

Silverbell
Halesia carolina
East Fork Pigeon River
April

Wild Plum
Prunus sp.
Black scaling bark
Fragrant
Twig-like thorns
Kings Mt.
April

Flowering Dogwood
Cornus florida
Widespread
March - April



Wild Crabapple
Malus sp.
Pink buds, fragrant
Twig-like thorns
Du Pont area;
Pisgah Inn
May

SHORTIA is published quarterly for members of the Western Carolina Botanical Club.

Editor: Helen Turner, Carolina Village Box 126, Hendersonville, NC 28739.

Please submit contributions for the next issue by May 15.

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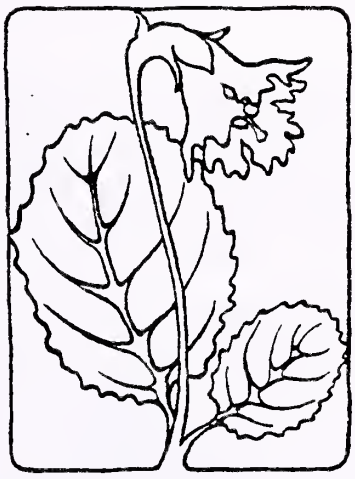


HELEN TURNER, Editor

CONGRATULATIONS, AUGUST KEHR

We are proud to announce that our president, Augie, received the B. Y. Morrison Award at the annual meeting of the American Rhododendron Society in Washington D. C. on May 8. The Award included a medal and $1000 honorarium.

Augie was president of the American Rhododendron Society 1975-1977 and of the American Genetic Association in the 1960's.

The B. Y. Morrison Memorial Lectureship was established by the Agricultural Research Service of the U. S. Department of Agriculture to recognize outstanding accomplishments in the science and practice of ornamental horticulture and other environic sciences ... to encourage their wider application to improve the quality of life ... and to stress the urgency of preserving and enhancing natural beauty in man's surroundings.

Mr. Morrison was the first director of the National Arboretum.

CALLAWAY GARDENS FIELD TRIP

For the 21 WCBC members who toured the Callaway Gardens, Pine Mountain, Ga., on March 25-27, Augie Kehr's knowledge of azaleas was obvious and his friendship with Fred C. Galle was a bonus. Galle is chief horticulturalist at the Gardens and spent a day and a half guiding us. He also arranged for us to tour the gardens at the Cason Callaway home under the guidance of its chief gardener, Gordon Tyrell. Fred and his wife, Betty, capped the trip with an invitation to their lovely modern home, where we saw some of Fred's scale model wood carvings of mushrooms. For each family there was a souvenir plant -- the rare and threatened *Silene polypetala*, which brightened many of our gardens in May with its fringed pink blossoms.

Callaway Gardens is the result of efforts of Mr. and Mrs. Cason J. Callaway, Sr., to reclaim a large plot of depleted and eroded land. In time a portion became a place for employees in the family's textile mill to enjoy the out-of-doors. Today this is a 2,500 acre garden operated by the Ida Cason Callaway Foundation as a place "where all may find beauty, peace, inspiration, knowledge and wholesome recreation." A subsidiary operates recreational, lodging and retail facilities.

Each of the participants would probably mention different plants or aspects of the plantings as the "best" of the trip: wildflowers, dogwoods, formal boxwood gardens, or even a newly emerged luna moth. The azaleas, however, were dominant. Several of the earliest native azaleas were in bloom and, with the exception of Pinxter-Flower (*Rhododendron mudiflorum*), all were species not found in western North Carolina. Florida Azalea (*R. austrinum*), golden yellow with reddish tubes, and Piedmont Azalea (*R. canescens*), which was seen in the typical shades of pink and also in a pure white form, were flowering profusely. Oconee Azalea (*R. speciosum*) was just coming into flower; this ranged in color from salmon to orange-red blended with apricot yellow. There were also a few specimens of Roseshell Azalea (*R. roseum*) whose normal distribution lies to the north, rather than to the south, of our area.

LOOK AGAIN !

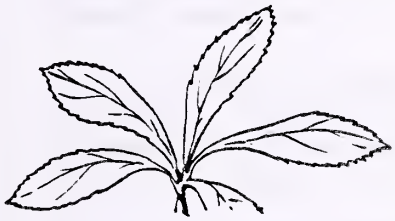
With the foliage of the trees overhead blocking out much of the sunshine, summer woodland flowers are relatively few, and the sight and fragrance of Pipsissewa in bloom are especially welcome.

The Indian name "Pipsissewa" is an attractive one, and its very sound - somewhat like a birdcall - makes it one of those words which we enjoy enunciating. Maybe the temptation is too great, for we often apply it without favoritism to two quite different plants.

For those who like to keep these things straight, the two are known technically as Chimaphila maculata and C. umbellata, but those supposedly descriptive scientific names can cause as much confusion as the indiscriminate use of "Pipsissewa" or, as we shall see, some of their other common names.

Chimaphila maculata

In each species, the nodding waxy flowers are in a loose corymbose cluster; not only are they not arranged in umbels, but the one that more nearly approaches that form is not C. umbellata, as you might expect, but C. maculata. Moving on to the latter, the specific epithet maculata means "spotted" and refers to the white markings on the dark green leaves, but they are not spots at all but broad stripes that follow the midrib and the secondary veins.



C. umbellata

We can resort to colloquial names, and yet avoid the "Pipsissewa"problem altogether, by calling C. maculata by its other nickname, "Spotted Wintergreen". Ignoring the first part, the term "wintergreen" is entirely acceptable as being descriptive of the persistent, evergreen foliage. Provided, of course, we don't forget that the true Wintergreen is another heath, Gaultheria procumbens! Chimaphila umbellata also has another name, "Prince's Pine", but whether it is thought to be scientifically irresponsible or merely whimsical, one seldom hears it used.

Ironically, the plants themselves present less cause for confusion than do their names. In addition to the characteristics already noted, C. umbellata has bright green unvariegated leaves with serrate margins, and petals tending more toward pink, while the leaves of C. maculata have widely spaced teeth and its flowers, if not white, are only slightly roseate.

Dick Smith

THE SIGNIFICANCE OF DNA -- A LAYMAN'S EXPLANATION

The letters DNA stand for deoxyribose nucleic acid which, in molecular form, is found in cells of plants and animals, and which carries hereditary information.

To relate this brief definition to plant life, it is helpful to first review the composition of a typical living plant cell. As shown by Sketch #1, the contents of the cell are contained within the cell wall (walls are lacking in animal cells). Adjacent to the periphery of the wall is the living material known as cytoplasm in which the nucleus and the chloroplasts, containing chlorophyll, are imbedded. Irregular in size and volume is the vacuole containing cell "sap" -- mostly water with dissolved, very low concentrations of numerous chemical substances.

For continued consideration we are concerned with the nucleus. As depicted in Sketch #1, the nucleus can be viewed by a light microscope magnified approximately 600 times. To search farther to reveal the contents of the nucleus, the scanning electron microscope must be employed providing magnifications of several thousands of times that actually enables viewing of molecules of matter.

Observed microscopically in the nucleus are elongated and irregularly shaped paired bodies known as chromosomes (Sketch #2). They are the determiners of hereditary characteristics. As cells divide during growth these chromosomes pair and split so that equal chromosomes and their genetic characteristics are faithfully reproduced.

On these chromosomes is the actual carrier of this genetic information, the DNA molecule. More highly magnified, the DNA molecule appears long threadlike, assuming an irregular winding configuration, as shown by Sketch #3.

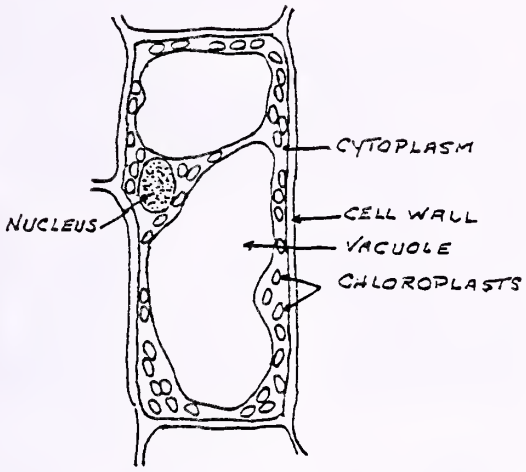
This DNA strand, a complex chemical structure, has the hereditary genes in the form of proteins and bases distributed along its double helix length as shown diagrammatically by Sketch #4. The number and characters of the genes vary in accordance with subject under study -- be it bacteria, higher plant tissue, or animal substance.

So in effect, the language of life in the genetic code is stored in the DNA molecule. And this language is rapidly directing biological research into the alteration and recombination of the genes of the DNA ribbons in a relentless revolution known as genetic engineering.

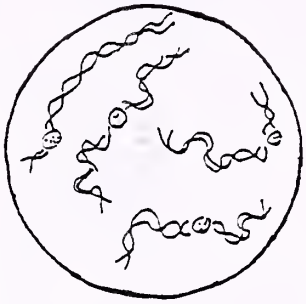
Gene splicing experimentation, although currently intensively pursued, has much to be proved before some of the envisioned benefits are attained. A long list of proposals includes the insertion of new genes to enhance the nutritive value of certain farm crops and enable plants other than the legumes to extract nitrogen from the air for soil enrichment. One study of the potential for new genetics in agriculture forecasts a 50 to 100 billion dollar worldwide market developing in the next 20 years. The latest actual development, "the gene machine", is a desk-top computer that automatically synthesizes fragments of genes whose genetic code can be typed on a keyboard!

What next?

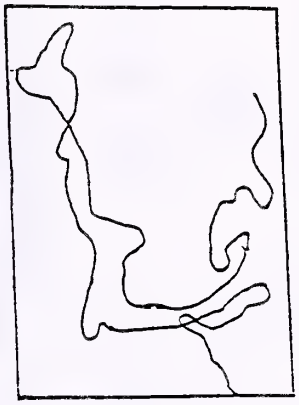
Harvey Krouse



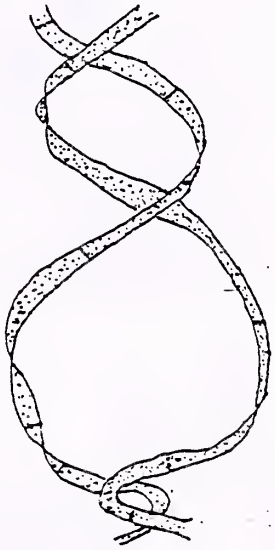
SKETCH #1
DIAGRAM OF LIVING CELL



SKETCH #2
DIAGRAMATIC CONCEPT
CHROMOSOMES IN A NUCLEUS



SKETCH #3
LONG THREAD-LIKE DNA MOLECULE



SKETCH #4
PART OF DOUBLE HELIX OF DNA

JUST A REMINDER

On June 8 the WCBC will have its day of weeding at the Asheville Botanical Gardens. Let's have a good turnout for this event. Bring your own tools and lunch.

Hendersonville group meet at Ingles at 9:15 AM and join others at the Gardens at 10:00 AM.

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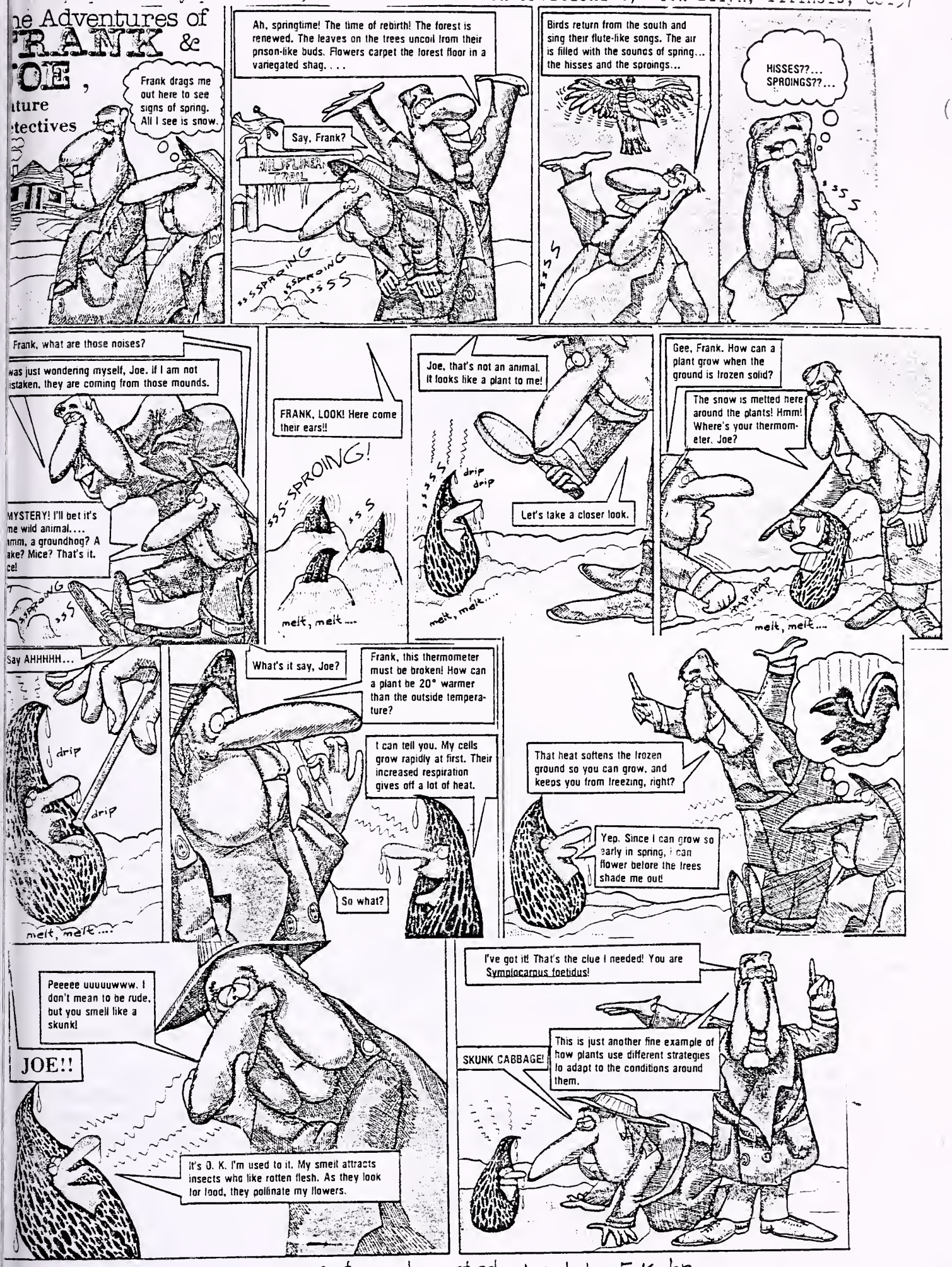


cut and pasted by John F. Kuhn.

CLEISTOGAMOUS WILDFLOWERS

I hold a record of sorts. I have taken Harvey's wildflower course at BRTC more times than anyone else. Like Peggy Camenzind, I learned what zygomorphic and actinomorphic mean. But I also learned what cleistogamous plants are. One day Harvey told us that the Violets -- all except Birdfoot -- are cleistogamous. That is, they produce flowers that are self-fertilized within the unopened flower bud. I held up my hand and asked Harvey if there were any other wildflowers that had this same characteristic. You know what his answer was? He said: "Why don't you just take that on as a research project? You find out and let us know." I still say Harvey's a great teacher.

I finally got around to doing some research on this and, so far, I have learned that the following wildflowers, in addition to Violets, are cleistogamous:

- o Gay Wings or Fringed Polygala (Polygala paucifolia) -- we saw this rather rare plant at Charlie Moore's Preserve on April 22, 1977.
- o Venus's Looking-glass (Specularia perfoliata)
- o Hog Peanut (Amphicarpa bracteata)
- o Touch-me-not or Jewelweed (Impatiens pallida)

But that's all I can find. CAN ANYONE ADD TO THIS LIST so that I can complete my research project and get my degree?

I also learned that the normal kind of flower is called chastogamous, and that every plant that bears cleistogamus flowers also bears chastogamous ones as well, but it's usually only the cleistogamous flowers that set seed. Usually the chastogamous are very colorful and conspicuous -- witness Violets and Gay Wings.

Ralph Raymond

WHAT'S IN A NAME?

I wondered why the pretty Carolina wildflower Trautvetteria carolinensis, known also as False Bugbane, would have such a foreign sounding name. After consulting with Dr. Edgar Reilly, conservator of the N. Y. State Museum at Albany, and Ritchie Bell at Chapel Hill, and with some assistance from my son, John, I now have the story of the naming of this flower.

In a list of some hundred plants collected at Salt Pond Mt. in Virginia in 1890 was this herbaceous plant that had originally been listed by Walter in his 1788 FLORA CAROLINIA in the genus Polygynia. Later, in 1803, Michaux in his FLORA BORIALI called it Cimicifuga palmata. Still later Anna Vail more correctly named it Trautvetteria since it had features of a Japanese species T. japonica, which had been named by Fisher and Meyer in honor of Ernst R. Trautvettia, Professor of Botany at the University of Kiev, Russia.

So -- this plant is a native American, similar to a Japanese plant named for a Russian botanist! There is only this one species of this genus in North America, but such a distribution pattern -- southeast Asia and southeast North America -- is not uncommon in some other families of plants.

Ben Tuller

HISTORIAN'S REPORT

Starting with the Hardy Souls hike in February, we have had a most interesting series of field trips this Spring. In February, 12 of us walked in the snow and cold and enjoyed it. At the end, Bob and Martha Taber invited us to their home to have our lunch in warmth and comfort.

We have had several good indoor slide shows -- all well attended. Harvey Krouse, Harry Logan, and Dr. Creech gave interesting talks on Plant Functions, Indian Artifacts, and Plants of Japan, respectively. John Kuhn gave us his Preview of Spring Flowers. Dick and Jeanne Smith not only showed slides but fed us doughnuts and coffee at the start of their Davidson River walk.

Soon thereafter, Harry Logan and a sizable group took the trip to Callaway Gardens.

It is impossible with our limited space to tell the full story of every trip -- so here are a few reminders:

Clemson University Experimental Forest was an entirely new area to us. The trail was lovely and we saw many plants blooming.

Several old stand-by areas provided the usual good walks and flower counts: Table Rock, Barnardsville, Augerhole, and Holmes State Forest.

Moore Cove Falls brought out 43 persons to see a lovely trail and falls, and some 40 flowers in bloom.

The Great Smoky Mountain trip, taken by 15 members, proved to be a very beautiful one -- flowers blooming all along the Blue Ridge Parkway; Serviceberry so thick on the mountains that it looked like a white mist among the pines. On the trail, we saw the most flowers blooming of any trip this Spring -- 72 in all. Even the drive home late in the afternoon was lovely.

Two scheduled trips had to be called off because of bad weather: Bat Cave (twice) and the Cradle of Forestry.

This Spring we would like to acknowledge with appreciation a number of special and beautiful trips on private estates. To all the following we wish to say: "Many thanks for your interest in and kindness to the WCBC."

Millie Pearson -- at whose home we had our lunch along her lovely rushing stream after we had walked her trails and seen some 42 plants in bloom.

Frank and Mrs. Bell -- who asked us into their home. Frank took us on the trails and to the bog after which we ate lunch under the trees near their house high on a hill.

Charlie Moore -- who is always so willing to welcome our group and to spend his time taking us over the lovely trails, bog and meadows of his property. We much appreciate his knowledgable, cheery trail guiding.

Mr. and Mrs. Shinn -- who have always welcomed our group and who, in recent years, have depended on us for trail guides during the Spring Wildflower Pilgrimage at UNC when persons visit their gardens on two successive days. This has proved a mutually happy occasion.

Reports of scheduled events after the middle of May will appear in the next issue of SHORTIA.

Louise Foresman

NEW MEMBERS
(Hendersonville understood unless otherwise specified)

Ammann, William & Virginia, 29 Peachtree Lane 692-9443

Bellamy, Lorraine, Rte. 2, Box 519 .....

Blaha, George & Mildred, Drawer F, Cedar Mt. 28718 885-2424

Graves, Rupert D., 919 5th Ave. W 692-1690

Kriner, Ray & Janet, 4 Little River Lane 692-7295

Lindley, Mary Ellen, Franklin, NC 28734 .....

Moore, James B. & Ruth, Rte. 3, Box 450, Fletcher, NC 28732 .. 684-8554

Pearson, Mildred, Rte. 1, Box 330, Saluda, NC 28773 749-3171

Stevens, Bill & Jeanne, P O Box 2685, Hendersonville 28793 ... 693-1942

Wagner, Louise, 1700 5th Ave., Villa 13 692-7333

Winter, Robert & Lois, 110 Cannon Dr. 692-3855

Not indexed

S H O R T I A

Vol. IV No. 2

SHORTIA is published quarterly for members of the Western Carolina Botanical Club.

Editor: Helen Turner, Carolina Village Box 126, Hendersonville, NC 28739.

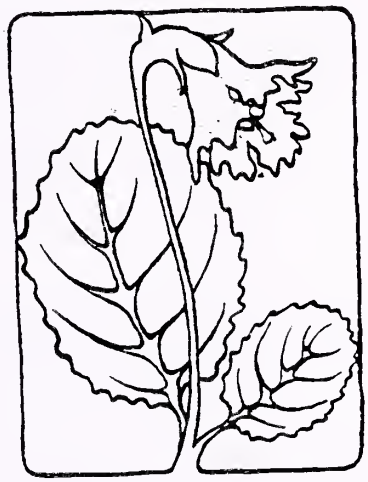
Production Committee: Dorothy Rathmann, Bruce and Blanche Leech.

Please submit contributions for the next issue by August 15.

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

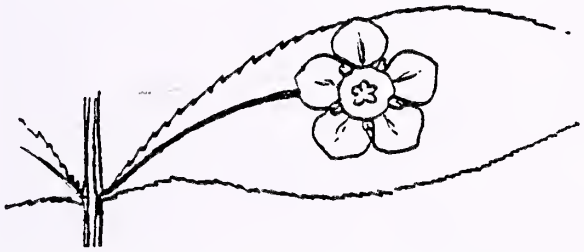
Parmi, Erika, Rte. 2, Box 44E, Pisgah Forest 28768 .....

Rice, Ed

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

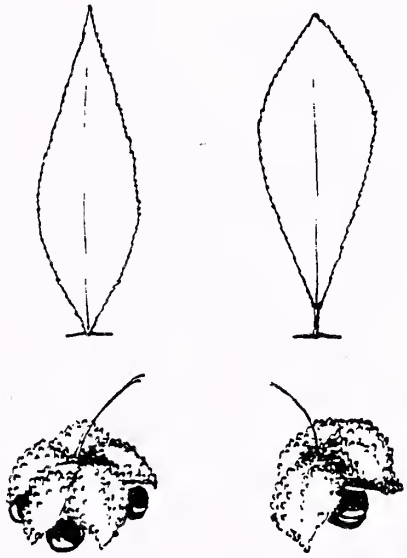
LOOK AGAIN !

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 vermilion 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 Wildlide 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!

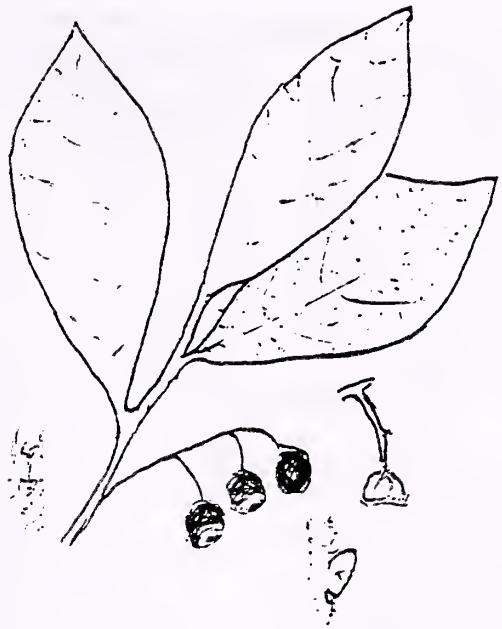
Louise Foresman, Historian

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 corymb
  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 ..... altissima
        a. Stems glabrous throughout, often glaucous (whitish bloom). Inflorescence more lax, recurved.. gigantea
      1. Involucres 2-3 mm long; noticeably small-headed; stems pubescent. Panicles large, lax ..... canadensis
    A. Lower stem leaves have one principal vein
      1. Leaves with distinct petioles
        a. Lower leaves broad, stem smooth except in inflorescence, 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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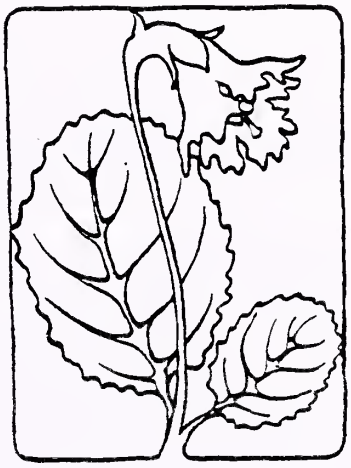
Please submit contributions for next issue by Nov. 15.

SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB

WINTER 1982-83



HELEN TURNER, Editor

RAMBLINGS FROM A RETIRING PRESIDENT

"Things are always best in the beginning" --- Pascal

The fall season in the western Carolina mountains is truly a season to behold. Every hill is clothed with a garment of an uncountable myriad of colors against a background of azure blue sky. In the words of the poet, "then, if ever come perfect days." Even though the poet was speaking of June, perhaps he would have changed his poem to mean October had he seen our mountains in the fall.

But just suppose that fall were to be our only season! How long would we continue to be overcome by the glories of the season? It would not be long before we would cease to see the finer things, and we would become depressed by the lesser joys of fall -- thousands of leaves stopping up the downspouts, or increased heating bills, or roadways made dangerous with wet, slippery things on the surface, or just plain boredom of nothing new. My brother could not wait to get home from Hawaii when he was stationed there in the services. He so badly missed the change of seasons that he ceased to feel the warm sunshine day in and day out, or to enjoy all the other things that make it an island paradise.

In like manner, it is good to have a new order of things in our organization. Such changes are invigorating. As retiring president, I wish to thank each member for making the Western Carolina Botanical Club such a fine organization. I extend best wishes to the incoming officers.

Augie Kehr

THE NOMINATING COMMITTEE

On August 6 at Carolina Village, President Augie Kehr appointed a nominating committee of Bessie Sinish, Tom Hallowell and John Kuhn.

Believing the selection of qualified people to be vital to the continued success of this Club, the committee labored long to come up with the following slate: Historian - Louise Foresman; Secretary - Margaret Canfield; Treasurer - Margaret Kuhn; Vice President - Sam Childs. These people plus Augie Kehr have guided the Club through 1982, a very successful season. As our current President, Augie Kehr, did not wish to continue as President, we have selected a very capable person of wide knowledge in the botanical field -- a quiet, pleasant personality who knows where the flowers are and the trails to travel to find them.

WE LOOK FORWARD TO A VERY SUCCESSFUL SEASON WITH -- DICK SMITH!

John F. Kuhn

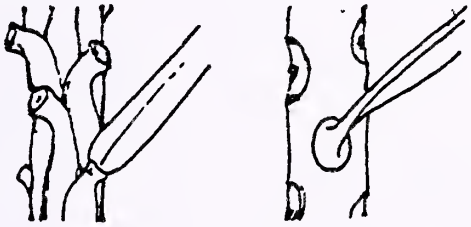
LOOK AGAIN !

"He Balsam" and "She Balsam" - the names would seem to indicate a dioecious species, or at least very similar plants, but such is not the case at all. They differ from each other in many ways, and the wonder is that we can so easily be confused even when we see the two side by side.

First of all, the name "He Balsam" is simply a local one given to a Red Spruce (Picea rubens) that happens to be growing in the southern highlands instead of, say, the Adirondacks or Ontario. "She Balsam" probably has a little more legitimacy, since the tree it applies to is found only in the Southern Appalachians; technically it is a Fraser Fir (Abies fraseri).

Both trees are conifers, and that alerts us to a basic difference: On spruces the cones are pendulous and on firs they are upright. Also, the cones of spruces fall from the tree intact, but those of firs usually disintegrate, dropping their scales one by one.

So far so good, but often the cones are high on the trees and out of view. So let's look at the needles. Spruce needles are square in cross-section and can be twirled between the thumb and forefinger, while fir needles are distinctly flat. Just remember: "S" = Square = Spruce, "F" = Flat = Fir. Also look at their attachment to the twigs. Spruce needles are mounted on short stubby projections which remain after the needles are removed. Fir needles, on the other hand, are attached directly to the twigs and leave only smooth, flat, circular scars.



The name "balsam" does not belong to any genus, but it has been freely used in vernacular names not only for firs and spruces but for Balsam Poplar, the old-fashioned garden Impatiens, and other plants. The word also refers to resinous secretions of certain trees and shrubs, notably "Canada balsam", which is obtained from Balsam Fir and is used in preparing microscope slides. Such a substance is produced copiously by Fraser Fir and collects in blisters beneath the thin outer bark. It is this characteristic, with its suggestion of "a tree that gives milk", that is thought to provide an explanation for the colloquial term "She Balsam".

Dick Smith

RAMBLINGS -- PEOPLE, PLANTS AND PLACES

From the last hike in July through the second one in November, 1982, we had an average of 24 persons per hike -- the greatest number, 56, came to Holmes State Forest for the covered dish treat and celebration of Helen Turner's birthday -- the smallest number, 8, made the trip to Camp Alice.

FRYING PAN GAP -- a hike on a cloudy, cool day, Sam Childs as leader, showed us so many flowers (66) along the Parkway and entrance road that the group did not get far into the Gap. HOLMES STATE FOREST, short and long trails led by John Kuhn and Dick Smith, showed a good many flowers blooming. On the trip to TRESTLE GAP, the group divided into two sections: Peg Camenzind led one and Nan Morrow led the other. Hold on to your hats! Those who went with Nan over Black Balsam Mt. were nearly blown off the trail and over the edge. But all were rewarded with some 50 flowers in bloom and a long ramble in the meadows to pick blueberries.

THE BLUE RIDGE PARKWAY TRIP was led by Miles Peelle on a sunny day despite threatening rain clouds. Botanizing stops were made at Cold Mt. View, Cherry Cove Point, Long Hollow, Wolf Mt. Overlook, Courthouse Valley Overlook. The CAMP ALICE (Mt. Mitchell) hike led by John Kuhn was the smallest turnout -- a special loss to those who didn't make it for fear of rain. It cleared to a lovely, sunny day and an interesting hike with an exceptionally good showing of Grass of Parnassus. LAUREL RIVER GORGE, John Robinson leader, was a "botanist's paradise" with some 33 flowers in bloom and a great variety of ferns, trees, and mosses of note.

Another absolutely perfect fall day found us at GRAVEYARD FIELDS, John Peavey leader, and blueberries still in the meadows. Lunch on the big rocks by the Falls. The return trip had some of us bush whacking through the thick undergrowth seeking a trail on the other side of the stream -- no luck! A new area, WHITESIDE MT., was a most spectacular hike led by Phil Babcock with great views of the mountains over toward South Carolina, many flowers identified as well as ferns, mosses, fungi and trees -- a prolific area well worth a return trip. Ivan Kuster led us on a hike in the COVE CREEK RESERVE, a heavily forested area, in which we braved rain to be rewarded by a clearing, beautiful day. Many flowers seen, as well as quite a variety of trees we don't often see which Harry Logan helped us identify.

Only 9 persons with Harry Logan as leader made the long trip to the LINVILLE WILDERNESS AREA where there are spectacular views on a beautiful sunny day -- some 14 flowers blooming including the rare Hudsonia montana -- lunch on top of Shortoff Mt. A close-by area, FRUITLAND, was visited on another beautiful fall day -- but with the Foresmans lost and wandering the side roads with new members, Rob and Marge Laughrey. They were delayed at the meeting place, missed the group at Fruitland crossroads and never found them -- so since the Laughreys had never been to Holmes State Forest we drove there and enjoyed hiking the long trail. We do regret having caused Tom and Barbara Hallowell, the leaders, and the group to worry over our disappearance, and we missed being with you all.

One of the most enjoyable hikes of the entire season was the trek to OGLE MEADOWS atop Coxcomb Mt., led by Ben Tullar. Absolutely spectacular 360 degree views from the top -- all the mountain ranges in full view. Snowball fight, anyone? Yes, we found snow enough to pelt a few! On some slopes were tree farms with perfect and healthy-looking Fraser fir trees. Scattered in the meadow on top were a number of lovely, very old trees spaced randomly which emphasized their gnarly, special shapes. It was as still and warm as a summer day on top as we ate our lunches looking at the mountains and valleys around us. A really great trip -- hopefully to be repeated. On another day we followed Marge and Julian Little to CHIMNEY ROCK -- we started out in 30 degree weather with a windchill factor down to 20 but the sun warmed things up as we hiked along and, in the woods, there was little wind. Along the trail, many long icicles on the mountainside caught our eyes in addition to some flowers, two species of Woodsia ferns and well as other ferns and 14 trees were noted, including the wafer ash. The views from the top overlooking Lake Lure were beautiful.

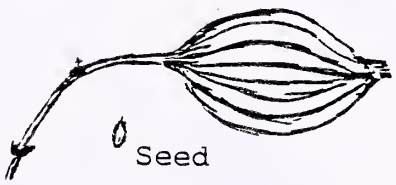
Some of our members are busy this fall teaching classes at Blue Ridge Tech:

TREES OF WESTERN NORTH CAROLINA -- Barbara Hallowell
ABOUT BIRDS -- Tom Hallowell
KNOWING THE INSECTS -- Elton Hansens
TREES AND SHRUBS FOR THE GARDEN -- Harry Logan

So, as you can see, these past months have been busy, interesting ones for our members.

Louise Foresman, Historian

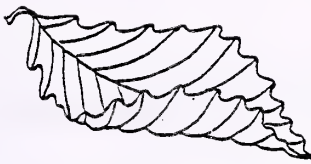
Calycanthus floridus -- SWEET SHRUB



When seen in the fall the mahogany colored flower is gone and the bulbous seed pods hang conspicuously from leafless branches. The capsule contains fifteen or more poisonous seeds.

This native shrub is found, here, on hills and stream banks at the margin of deciduous woodlands, chiefly in the upper piedmont and mountains.

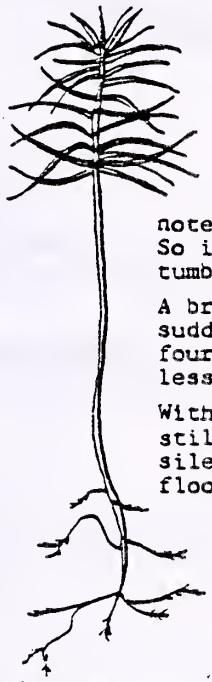
Bess Sinish



Sitting on the Floor

There's a best time--when the sun beats down extra-bright and warms the floor of a secluded niche. One can sit there in leisurely comfort, experiencing close surroundings. What a long list of things can be seen on the floor--oh! this floor is in the winter forest, by the way, a place often avoided "because there's not much to see there then."

Only inches away and several inches high, a seedling white pine pokes up between lobes of an oak leaf, contributing a dainty touch of green in the colorless leaf cover. Colorless? Rich browns and rusts, soft beiges and tans, and a full scale of grays persist after fall's brighter hues.



Life size

Tiny hairs, backlit by sun and glittering like frost spicules, line the underside veins of a beech leaf. A wee spider appears suddenly on the leaf, waits motionless a moment, alert and interested, then vanishes. Obviously, sun's heat activated him, but what might have been his hasty mission? Curiosity? The hunt?

Curling gracefully, the round-toothed edges of a chestnut oak leaf criss-cross the vein lines in a beautifully wavy pattern.

Surprise! A tiny inch worm--no, a 3/4 inch worm--climbs onto a notebook of jottings, humping three humps per line on the white page. So intent is he that at the page's edge, he hurries on into space, tumbling to the floor, quite lost. Doesn't he know this is winter?

A breath of air rustles leaves persisting on a young white oak. One suddenly lets go and topsy-turvies downward, falling directly onto a four-inch hemlock which seems to support this unexpected burden effortlessly.

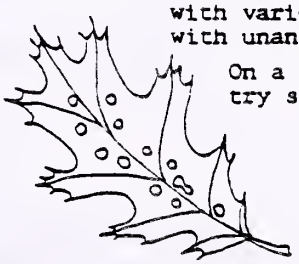
Within the soggy decay of last year's leaves, tiny soil creatures still busily pursue their lowly business, scurrying or creeping in silence, unwittingly serving man and nature as they break down forest floor debris to prepare it for recycling.

Lines of holes in oak leaves present a mystery. What creature caused them, all so neatly arranged? And here's a mitten leaf! Sassafras grows nearby.

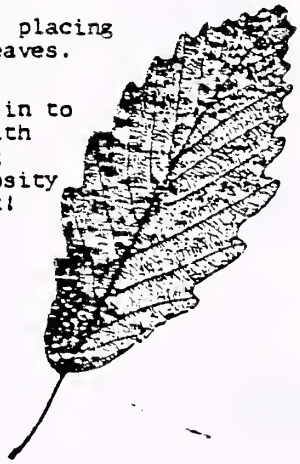
Insects and decay organisms have cooperated to create lacey finery, a framework left behind after a leaf's green tissue has been used. Leaf lace held to the sky displays the marvelous, delicate tracery of tiny veins which carried nutrients and fluids to and from the leaf.

A hand lens magnifies the fuzzy interior of an acorn cup, placing it among the red or black oaks with the bristle-tipped leaves. Cups of round-lobed oaks are smooth within.

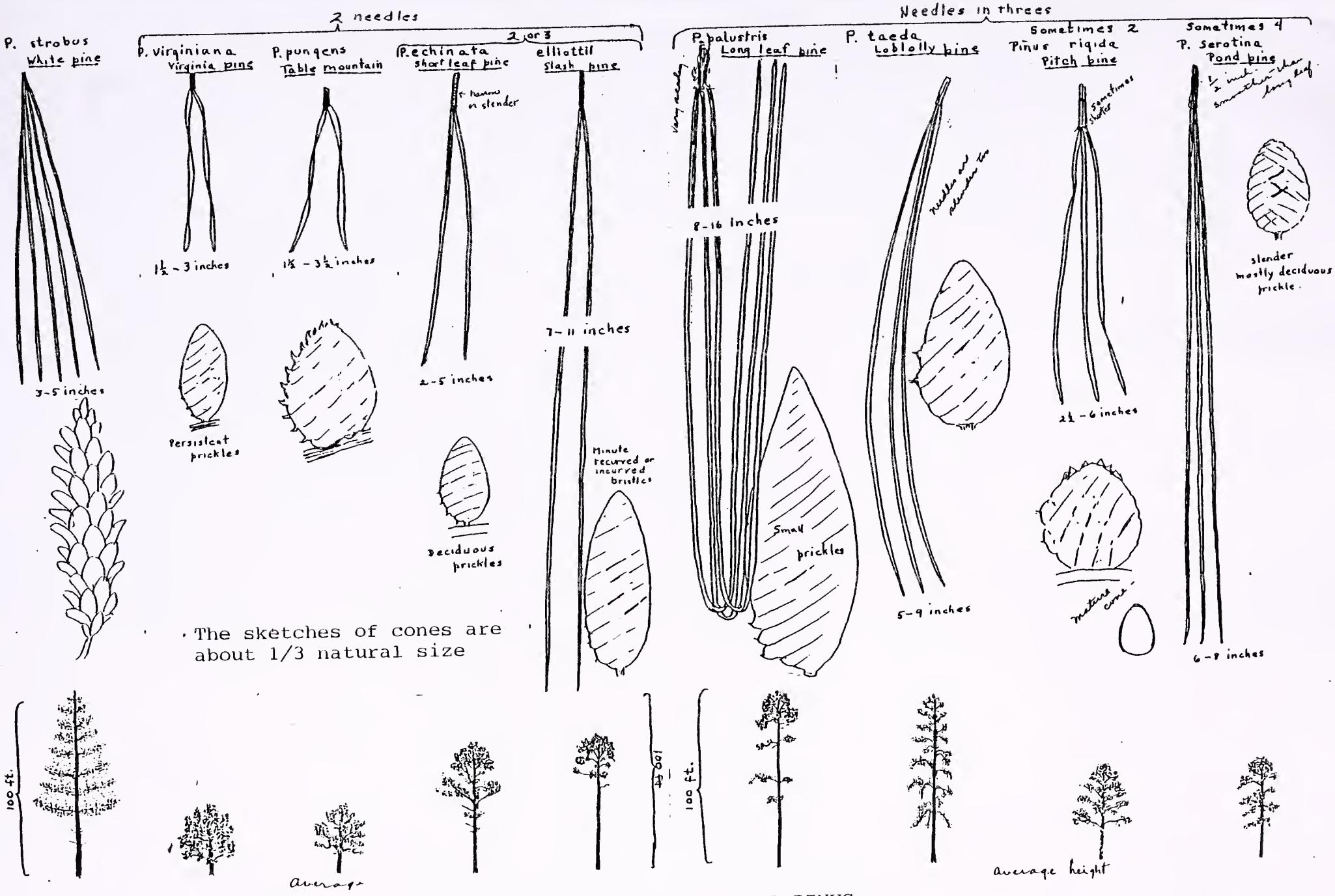
From all around, messages from winter's forest floor pour in to the observant eye and appreciative heart, entertaining with miniature drama, satisfying with bits of beauty, pleasing with variety and familiarity, and exciting curiosity with unanswered questions. The messages delight!



On a sunny, quiet day this winter, try sitting on the floor!



BGH.



The sketches of cones are about 1/3 natural size

PINES OF THE CAROLINAS - GENUS PINUS

S H O R T I A

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