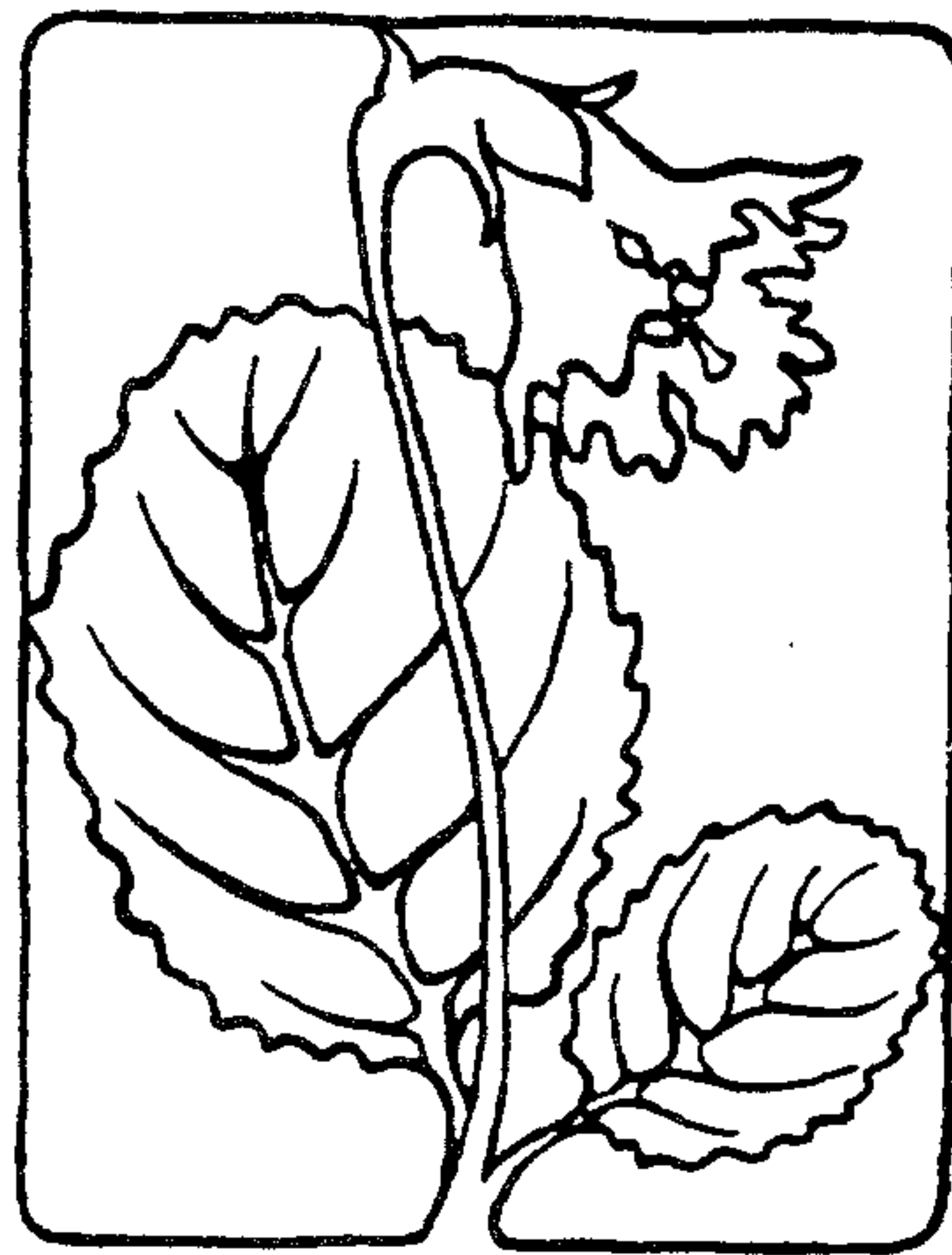


SHORTIA

NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB

AUTUMN 1995



ELTON and ALINE HANSENS
Editors

WESTERN CAROLINA BOTANICAL CLUB

President: Don Herrman Treasurer: Elaine Montgomery
Vice President: Dean Crawford Recorder: Erika Parmi
Secretary: Laverne Pearson Historian: Louise Foresman

FROM THE PRESIDENT.....DON HERRMAN

Where do you want to go? What do you want to see? Tell your Club officers. Time is passing. It will soon be time for another planning session of the Program Committee. Your ideas will be appreciated.

Speaking of passing. How about passing the word down the line. Having been the sweep on some of our outings it is always interesting to hear what is going on. I know the view is best up front, but lets tell the people down the line. They deserve it.

The weather has been messy for a few of our trips but it held out very well for the picnic. We want to thank our enthusiastic members for their discoveries and interest in the wild orchids. The green adders mouth still has it's little fence around it and the green wood orchid is in full bloom. Our members also left us with some glassware and a place setting of "silver".

The saga of our meadow goes on, the moss is encroaching, but the meadow beauty reigns supreme; can the ladies tresses be far behind. I may never have to mow again.

Have fun---and for the forgetful--dues are still due.

DOROTHY M. RATHMANN -- A TRIBUTE

Dorothy M. Rathmann, President of WCBC from Jan. 1993 to Sept. 1994, when she resigned for reasons of health, died July 4, 1995 in Pardee Hospital, Hendersonville. In addition to her term as President, Dorothy worked several years assisting Helen Turner as Shortia Editor and then Dorothy edited Shortia herself for 17 issues between 1986 and 1991. She also served on a number of committees and particularly arranged for the Cookie Fest each December.

Dorothy was much interested in wild flowers and for years tended the wildflower garden at Carolina Village. She also loved birds and took a number of trips to see special bird life. At Carolina Village she was a leader among the residents and served the community with distinction.

Her doctorate was from the University of Rochester and for 31 years she was associated with CPC International and retired as Director of Nutrition and Toxicology in 1979.

All of us in the WCBC who knew her well, respected her leadership, her writing, and valued her as true friend. We miss her.

RECORDER'S REPORT - JUNE THRU AUGUST 1995.....ERIKA S. PARMİ

This summer should eliminate any doubts about "the greenhouse effect" and the warming of the earth! Despite the constant heat and humidity of July and August there were turn-outs of 15 or more members for most of the field trips. Those who stayed home missed out on the natural air-conditioning of the higher elevations where most of the field trips were held. They also missed spectacular displays of flowering raspberry (Rubus odoratus) and forking catch-fly (Silene dichotoma) on the Grassy Ridge Mine trip and masses of Indian pipe (Monotropa uniflora) and fly-poison (Amianthium muscaetoxicum) at Haywood Gap. The flower displays at the meadow and along the roadside at the Bee Tree Gap were especially good this year. It was there that we saw green wood orchis (Habenaria clavellata). The Pinnacle Mountain trip with many seldom seen species was highlighted by fern-leaved false foxglove (Aureolaria pedicularia), spiked blazing star (Liatris spicata) and yellow-fringed orchis (Habenaria ciliaris).

As usual the picnic at the Herrmans' Ramblewood was well attended with 35 members present. Before lunch we rambled (as befits Ramblewood) around several of the trails. On one trail Millie Blaha had marked adder's mouth orchid (Malaxis unifolia). One was in full bloom and we were all able to enjoy its beauty.

Trips to Mt. Pisgah on July 28 and the Shut-In trip on Aug. 4 were cancelled because of threatening rain.

I missed some trips because, at a friend's urging, I joined her for a birding trip in July to Trinidad and Tobago - my second trip to the tropics. In spite of the promised trade winds, it was humid there, even more so than here. However, my enthusiasm for the spectacular and unusual beauty of both birds and plants was not lost. The tropical vegetation is overwhelming and even though one can only identify a few species, it is a treat to the eye. I urge all of you, as botanists, to make at least one trip to the tropics.

GETTING TO KNOW YOU.....ALINE HANSENS

Hatheway, Curt & Virginia: 2000 Plum Tree Lane
(Sugar Hollow Farm) H'ville, NC 28739 (704) 692-4404. Botanically interested--Virginia is in the Land O'Sky Garden Club and Curt is a horticulturist.

O' Grady, Dana: (winter address) 7149 Augusta Dr.,
Green Cove Springs, FL 32043.

ADDITIONS TO MEMBERSHIP LIST:

Perry, Pat & Lois: 32 Dvdisdi Ct., Brevard, NC 28712

Arrington, Daisy: 2490 F. Windsor Woods Lane,
Norcross GA 30071-2336.

NEW ADDRESS:

Prentice, Donald & Alta Mae; 217 Tulip Trail,
H'ville, NC 28792 (704) 687-3528.



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

In my quest to find out more about P.A. Davies and Shortia, I have received most (if not all) papers dealing with Shortia galacifolia from the National Agriculture Library, visited with Charles F. Moore who collected Shortia with Davies in the 1950s, and received an answer to my letter from Davies's daughter and from the P.A. Davies Herbarium at the University of Louisville.

I have 90 families in my woods and gardens and still hope to be over 100 by the end of 1995. My most unusual plant is one that came with some deciduous azaleas--Irish-moss (Soleirolia soleirolii (Reg.) Dandy) is both my smallest flowering plant and a new family (the Urticaceae). If you want to see Irish-moss in all of its miniature, flowering glory and its ideal habitat, walk the brick sidewalk in front of 1 Biltmore Plaza to Boston Way and down along the New Morning Gallery in Biltmore Village. (Carry a hand lens).

In Brevard our most unusual flowering plant in May was Dr. Miles Peelle's Amorphallus which was photographed in full bloom for an article in the May 15 Transylvania Times. Miles told me that this species has been in his family for many years and he is carrying on the family tradition by growing it every year at his home in College Walk.

In Deer Lake our three June floral beauties were rosebud orchid, (Cleistes divaricata) in Sue's woods; fly-poison (Amianthemum muscaetoxicum) along a roadside; and cow wheat (Melampyrum lineare) in the woods near Deer Lake. While in Polk County in June, we found a blooming plant of a climbing-milkweed, Matelea carolinensis).

The Summer 1995 issue of SHORTIA brought Millie Blaha's article on her discovery and identification of Origanum vulgare L., and her desire to add it to a revision of the Manual of the Vascular Flora of the Carolinas by Radford, Ahles, and Bell. Millie or someone else MUST make at least one correctly named, properly labelled herbarium specimen and deposit it in a herbarium. A documentation of this procedure may be found in Castanea (The Journal of the Southern Appalachian Botanical Society) Vol. 60. no. 1, pp. 84-85. This is a report of a new record of Holcus mollis L. from Macon County, NC. While no one is required to publish a new record, it is advisable. Millie made the identification and could make a label documenting its exact location, its associated plants, its habitat and its collector and collecting date. Pressing a complete plant in flower or fruit would not be difficult. The last task is to deposit the specimen in a herbarium. The nearest recognized herbaria to the Hendersonville-Brevard area are the University of Tennessee, Knoxville (TENN); Clemson University, Clemson (CLEMS); University of South Carolina, Columbia (USCH); University of North Carolina at Charlotte (UNCC); and Western Carolina University, Cullowhee (WCUH). The computerization of the southeastern U.S. herbarium sheets will permit those who revise the MANUAL to find sheets like these and add them to the revision.

A TRIP TO "THE BRUCE".....ALINE HANSENS

Always seeking new and interesting botanical areas to explore and photograph, we were drawn to the Bruce peninsula in Ontario. We have returned four different years in mid-June, never tiring of its beautiful display of wildflowers including several rare orchids. Better known as the "Bruce", this finger of land lies between Lake Huron and Georgian Bay, next door to Michigan. Often called a "naturalists paradise" it is truly unique geologically and botanically.

Once buried under ancient tropical seas and scoured by melting glaciers, the area is composed mainly of limestone with a cap rock of dolostone. The most prominent feature is the Niagara Escarpment, a world biosphere reserve which originated essentially as a barrier reef and winds its way like the Great Wall of China across southern Ontario. It follows the length of the peninsula to its tip where it continues underwater to form several small islands. Storms and erosion have created precipitous limestone cliffs and sea caves, and a rugged eastern shoreline of rocks and boulders along Georgian Bay, providing not only scenic views but a habitat for interesting and rare ferns. In contrast the western shore is a giant belt of rock pavement sloping gently into Lake Huron and stretching most of the length of the peninsula broken only by bays, marshes, beaches and dunes.

Moving slightly inland this bare rock plain becomes an unusual habitat known as alvar with islands of low lying vegetation growing out of crevices and fissures. Here we found harebells, bluets, silverweed and the dainty maidenhair spleenwort. Close to shore, near small pools of water, a number of insectivorous plants flourished including butterwort, pitcher plants, and two species of sundew.

The best example of alvar was at the Dorcas Bay Nature Reserve, one of our favorite spots. It covers 330 acres and includes a large fen (an alkaline, nutrient rich wetland) with an abundance of pitcher plants, an extensive coniferous woodland with many yellow lady's slippers, gay wings, and, most important, the beautiful but small ram's head orchid. In fact we found an amazing variety of plants in these diverse habitats!

Petrel Point Reserve, a rich wetland habitat of 51 acres includes fen, cedar swamp and woodland areas. Especially noteworthy were clumps of the very beautiful showy lady's slipper.

Before leaving the Bruce, a short trip to Flower Pot Island is a "must"! This island is on the escarpment and is so named because of its strange rock formations. Protected by the National Park, it is habitat for many plant species, including several rare orchids and a variety of interesting ferns.

A large part of this unique land has been preserved and protected by FON (Federation of Ontario Naturalists) and by 2 National Parks established by Canada which include a marine area of islands and lake bottom and a mainland counterpart of limestone cliffs, mixed woodlands, beaches and abundant wetlands.

A Botany Club trip to "the Bruce" anyone?

MATTHIAS KIN AND CYMOPHYLLUS FRASERI.....BILL VERDUIN

Near the end of the 18th century a German naturalist, Matthias Kin, came to this country to search for plants and seeds to send back to Europe. While on his exploring expeditions he dressed and lived as an Indian, and is said to have been of gigantic size, making an imposing appearance.

One of the most interesting plant specimens brought back to Philadelphia had odd, showy, white flowers with deep green glossy leaves. Though the location from which this plant came is not entirely clear, it most likely was the Tygart Valley in what is now West Virginia. At about the same time the Scotch botanist, John Fraser, was exploring in the Carolinas, hoping to find plants new to science that would be valuable additions to European gardens. In 1808, on his last trip to America, he discovered the same plant Kin had found in West Virginia. His find was on the banks of the Catawba River north of what is now Morganton in Burke County, NC. In 1811 Henry Andrew, a British botanist, named the plant in Fraser's honor, calling it Carex fraseri. We know it as Cymophyllus fraseri.

Despite its attractiveness, the plant was not reported again in WV for nearly a century, and even now is known in only 8 counties there. Radford et al list it as "rare". occurring in only 5 counties in NC. It has been reported in only a very few counties in VA and TN.

Botany Club folks have seen Fraser's sedge in just a couple of places over on the north side of the Smokies. Because this is the only sedge with an attractive bloom and because it is rare even in its very limited range, we have special pleasure when we do find a specimen. Enjoy!

ROCKY SHOALS SPIDER LILIES.....ELTON HANSENS

We took a notion to look at several SC State Parks in late May and consulted the SC "Parkview" publication of the SC State Park System. This is an excellent publicity piece listing many activities throughout the park system. In the Spring/Summer 1995 issue we found a feature article titled "Rocky Shoals Spider Lilies", Landsford Canal State Park. This looked like a place to visit and we did on May 25.

The so-called spider lilies actually belong to the Amaryllis family and the species is Hymenocallis coronaria which is native to the river shoals of SC, GA and AL. Within SC populations of plants are found at 3 locations on the Catawba River, 2 on the Broad, 2 on the Savannah and 1 on the Congaree. Flowers are at their peak from mid-May to mid-June.

When we visited Landsford Canal State Park we hiked the trail along the old canal to the view-point. The spider lilies were in full bloom and formed an immense display on the east bank of the Catawba. Near us on the west side of the river small islands of the plants gave a closer look at the "six spidery petals surrounding a brilliant white, cup-like membrane as large as an adult hand". The habitat is limited to rocky river shoals. The species is threatened and a candidate for endangered status. We took pictures and wished for a closer look at the details of the flowers.

We saw other interesting plants along the trail which followed the tow path and historic remnants of the canal built in 1820 to provide safe passage for commercial river traffic around the rocky shoals. Thus, we also experienced a bit of fascinating history.

Landsford Canal State Park is 6 miles west of Lancaster, SC off US 21. "Canoeing the Catawba" is a trip being offered Sept. 15 and Oct. 20, 1995. Fee \$15.00. (803) 789-5800.

MOSES ASHLEY CURTIS.....BILL VERDUIN

Curtis' goldenrod. Curtis' aster, (Solidago curtisii, Aster curtisii). Who is this fellow, Curtis, for whom these southern mountain species were named to honor?

Moses Ashley Curtis, 1808-1872, was born in MA, son of an Episcopal clergyman. He was educated at Williams College and subsequently prepared for ordination in the Episcopal Church. Sent to NC as a missionary, he lived at various times in Wilmington, Raleigh, and Lincolnton.

No one seems to know what sparked his interest in plants or where he got the training necessary for him to make such major contributions in his early plant explorations. Soon after coming to NC he did a survey of the coastal plain area within two miles of Wilmington, identifying almost as many flowering plants as were then known in the entire state of MA. Making good use of his missionary trips throughout the state, he was able in 1860 to publish a Catalogue of the Plants of NC. This was followed in 1867 by another Catalogue which was "probably the most complete and scholarly state flora that had been published up to that date".

Unusual for his time, Curtis became deeply interested in lichens and fungi. As early as 1845 he began to collect and classify lichens, accumulating a lichen herbarium which was later sold to Harvard. Curtis corresponded with Berkeley, the outstanding mycologist of that time, and contributed much to Berkeley's book, "North American Fungi." "His matchless collections, as well as his acumen in discovery of new species and his full notes, were indispensable to the first hand authenticity of the publications." There are at least two fungi and at least one lichen named curtisii in his honor.

Would that we could spend a few days travelling through these wild mountains with Moses Ashley Curtis!

LETTER TO THE EDITORS:.....J. DAN PITTILO, Professor, Western
Carolina University.

Your SHORTIA newsletter has certainly been a favorite of mine and many of you know that Dick Smith's excellent layman tips in his "Look Again" column are being reprinted in the Chinquapin, the newsletter of the Southern Appalachian Botanical Society. Earlier the Western Carolina Botanical Club was featured in Chinquapin's "Organizational Spotlight" column. This speaks of the quality and excellence of this fine newsletter.

Two of your Summer 1995 articles caught my attention and I wish to make the following observations.

Erika S. Parmi's "Recorder's Report- February to May 1995" mentions the presence of Disporum maculatum on the Givens Estates. In my experience this basifile and several others are frequently associated in our region with hornblende, gneiss or amphibolites. The even more common Trillium grandiflorum or Lindera benzoin sometimes provides a clue that basifiles are present. In our region, the more common rock types are acidic and we usually find basifiles to be rare. For this reason, the NC Natural Heritage Program (NHP) is interested in the diverse communities found over these basic rocks and I encourage you to notify the landowners and NHP when you find such rich basifile sites.

Millie Blaha did something in her search that more of us might emulate: there are ways to sort through various leads when one makes an unusual observation. Careful attention to details often results in something worth noting. Millie's and Anne Ulinski's observation of what is apparently Origanum vulgare may set an old, unverified record straight. It should become a part of the "Guide" for the Carolinas and Virginia that Alan Weakley now has underway. Anyone who discovers something new to the Radford, Ahles and Bell "manual" might drop a note to Alan at The Nature Conservancy, 101 Conner Drive, Suite 302, Chapel Hill, NC 27514.

Those of you giving your volunteer time to newsletters do not go unnoticed!

See use of this term in "Look Again" on next page.

TEPAL: A segment of perianth that is not clearly differentiated (except by point of insertion) into calyx and corolla.

from: Guide to the Vascular Plants of the Blue Ridge. by B. E. Wofford 1989 Univ. Ga. Press.

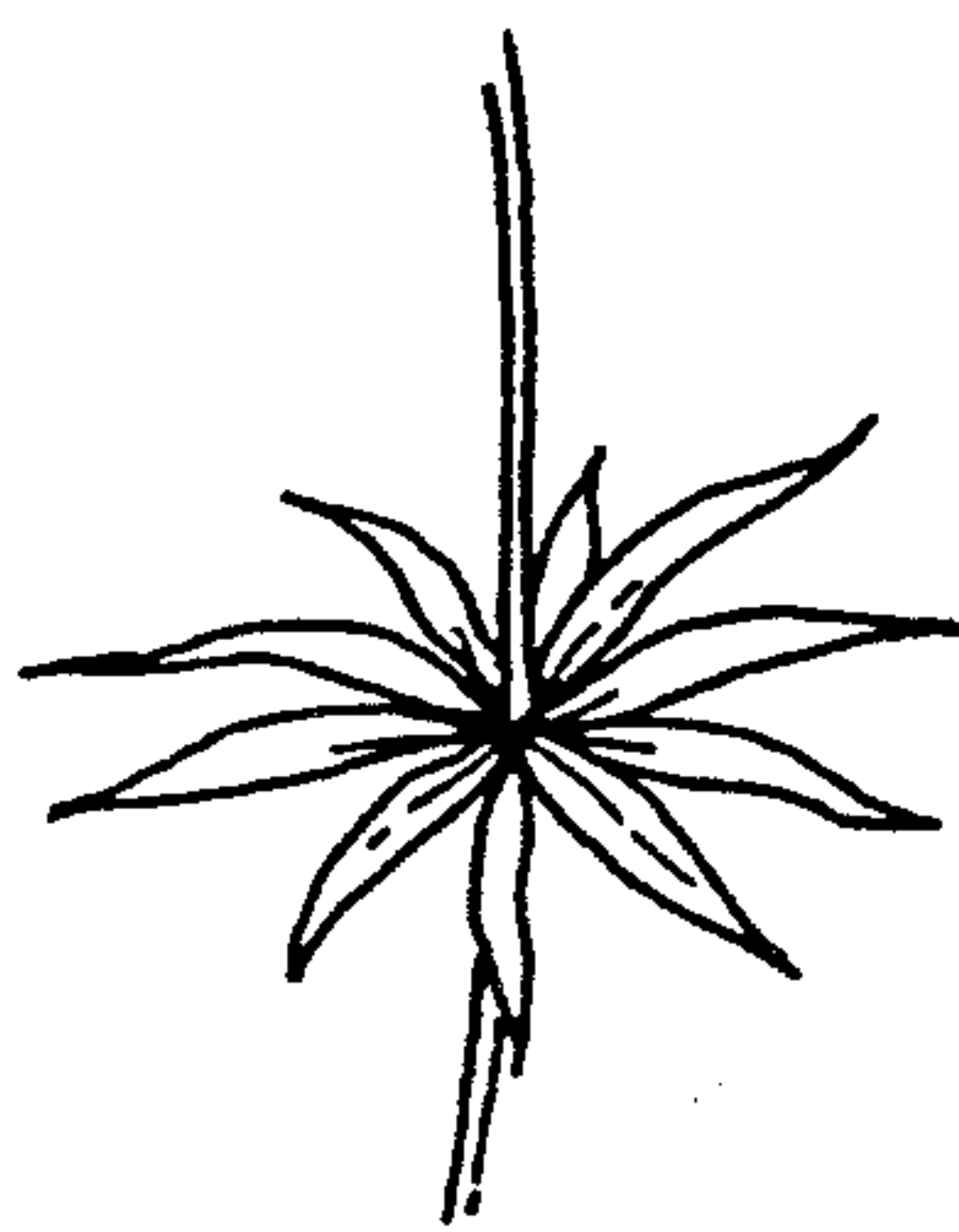
LOOK AGAIN !

Among our most imposing summer wildflowers are the true Lilies. All have large flowers ranging from yellow to orange-red with dark spots within, nodding except in one species.

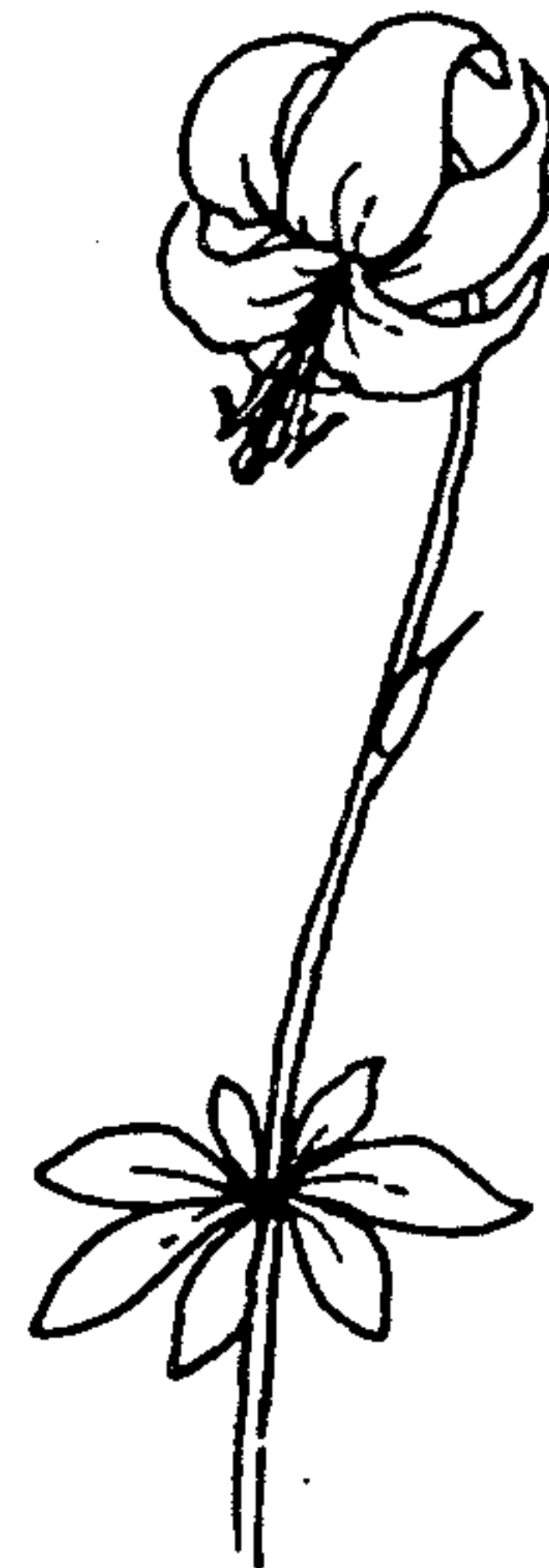
The tallest (8 feet or more) is the majestic Turk's-cap Lily (Lilium superbum). This may have whorls of up to 20 narrow lanceolate leaves and bear a score of flowers. The tepals are strongly recurved, exposing the long pistil and stamens; green stripes form a distinctive star in the throat.

Superficially similar is the Carolina Lily (L. michauxii), but this does not exceed 4 feet and seldom has more than 2 flowers, which lack the green markings. The leaves are fewer, shorter, and widest beyond the middle.

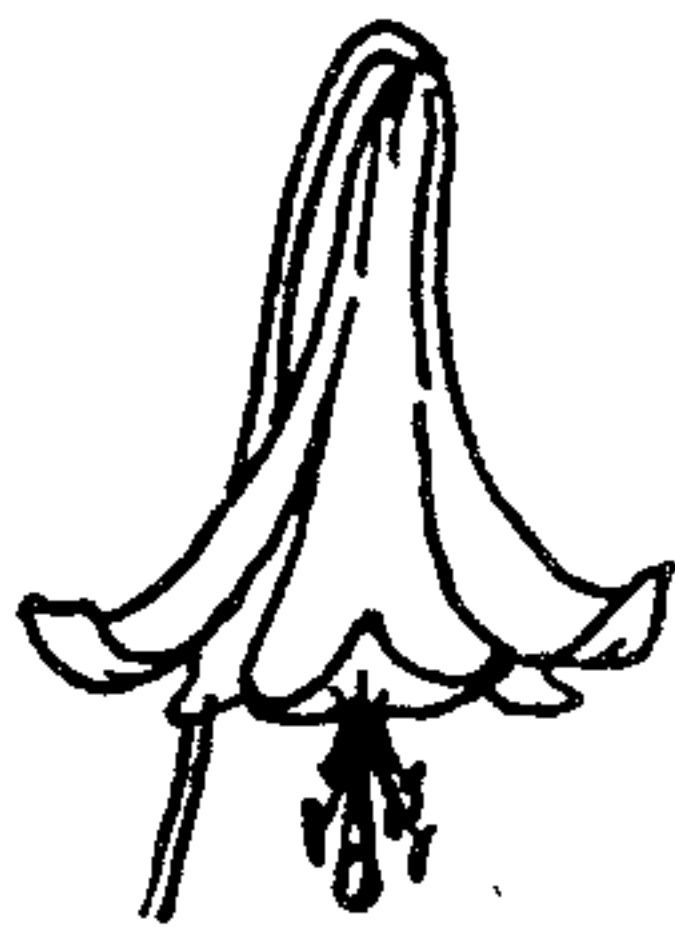
Canada Lily (L. canadense), uncommon here, has bell-shaped flowers with segments that are much less recurved and only slightly surpassed by the pistil. In L. grayi, Gray's or Roan Lily, the flowers are smaller and the tepals spread still less at their tips.



L. SUPERBUM



L. MICHAUXII



L. CANADENSE



L. GRAYI

Wood Lily (L. philadelphicum) is unique in that its flowers are erect and its tepals narrowed at the base to a slender claw.

Dick Smith

S H O R T I A

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Please submit contributions (articles, Letters to the Editors, notes, etc.) for the next issue by Nov. 10 to Elton J Hansens, 125 Far Horizons Lane, Asheville, NC 28803. (704) 277-7486.

SHORTIA

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