SHORTIA
NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
SUMMER 1996

ELTON and ALINE HANSENS
Editors
WESTERN CAROLINA BOTANICAL CLUB

President: Don Herrman  Treasurer: Elaine Montgomery
Vice President: Dean Crawford  Recorder: Erika Parmi
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FROM THE PRESIDENT..........................DON HERRMAN

Your sympathy and thoughtfulness will always be gratefully remembered and deeply appreciated.

This pretty well sums it up. Katherine's passing was very sudden and completely unexpected. The emergency services and the hospitals responded immediately and did all they could. The damage from the stroke was too massive. She passed away at 6:10 a.m., Friday, March 8.

Your condolences and acts of kindness to me and my family have been a big help all through this trying experience, so again let me say thank you from all of us. Don Herrman.

The Program-Schedule for July 1996-January 1997 is being developed and we anticipate mailing it to members in late May to early June so you can plan ahead for summer and fall. The Committee met and a suitable schedule of hikes and meetings is in the works. The problem is always to arrange a sequence which will be of broad interest and botanically challenging. That is half of the story. The other half is to get commitments from club members to lead and record. We try to find a leader and co-leader plus a recorder for each trip. Your help is solicited. Our aim as a club is to enjoy nature and to increase our knowledge. We need more leaders. Come, lead and learn.

We need your help!!

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.

The use of insect repellents will help keep many pests away. I find I rarely need a repellent on our trips. I keep a bottle in the car and use it infrequently. My preference is to suffer a little rather than use a repellent. EJH
Morgan, Shirley  Rt. 2, Box 56A, Horseshoe, N. C. 28742.  (704) 891-4544.  Shirley, a nurse, is a native of this area. Her interest in nature and Millie Blaha's course on Wild Flowers led her to join the WCBC.

Normile, Margaret  60 Brucemont Circle, Asheville, N. C. 28806. With an interest in plants, Margaret learned of the WCBC from member, Al Dupree.

Toth, Barbara  P.O. Box 9000, WWC Box 5010, Asheville, N.C. 28815. (704) 299-3473. Barbara, a plant ecologist, received her training at Oregon State and moved to Asheville with her family last July. Her husband teaches Biology at Warren Wilson College and recently they co-taught a course in plant taxonomy. Barbara's interest in learning the plants of this area led her to join WCBC.

Whitlock, Barbara  110 Pressley Ave., Brevard, N.C. 28712.  883-9313. Originally from Georgia, Barbara and her husband have lived 39 years in Brevard. Enjoyment of flowers and gardening led to an interest in wild flowers and encouraged by friend, Shirley Morgan, she joined the WCBC.

A REMINDER TO ALL LEADERS AND RECORDERS

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

JOYCE KILMER MEMORIAL FOREST is a great place to see flowers in spring and Snowbird Lodge offers a superior place to stay while exploring the whole area. Rise early and see sunrise from "The Point"; rock on the porch and enjoy the sunset. Will I ever remember the differences between all of those trilliums? EJH
SNOWBIRD MOUNTAIN LODGE...April 23-25, 1996
Random thoughts of the Participants.

After our long, cold winter with its snow, sleet and rain, the trip to Snowbird was a truly rewarding experience! Suddenly it was the spring we have been waiting for—the beautiful yellow greens of the newly opening leaves, an abundance of wild flowers and even a flock of evening grosbeaks at the Lodge feeders.

Did the initial cheerful slogging through the rain at Joyce Kilmer set the tone for this year's Snowbird experience? In any event, what followed was a memorably happy blend of good fellowship and relaxed sharing and learning from plant life abundance, the setting inspiring, the facilities most agreeable.

Back for the second or third time to this newly renovated lodge...a pleasant relaxing time. Our friendly, easy-going cooperative group enjoying whatever the "powers that be" had planned for us—rain or shine! A super large corner room plus more than ample meals. Who could ask for more!!

I feel so blessed being able to stay at such a beautiful place. I saw my first evening grosbeak. Thanks for arranging the trip.

Many thanks for a wonderful botany experience at the Snowbird Mountain Lodge area. The flowers were spectacular, wonderful food, and great fellowship.

To truly experience SPRING, one must spend a few days at Snowbird Mountain. It is thrilling to see hillsides of *Trillium grandiflorum*, the "arrangements" of blue phlox and phacelia, the exquisiteness of individual flowers. I am glad I made the acquaintance of *Uvularia perfoliata* with its soft orange stripe.

An exhilarating experience in a rustic setting. It was a joy to watch the sunrise over the mountains. The bird feeders were a big attraction to the birds and the birders.

The Snowbird spring wildflower retreat led us to these thoughts—"The serenity we felt looking out over those mountains; the beauty in recurring spring after such a harsh winter; the privilege of personal renewal among "botanical" people whose focus is characteristically outside themselves; and the discerning leadership which adjusted the program as it unfolded and led to such beautiful locations."

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

From Actaea pachypoda to Xanthorrhiza simplicissima (no Zizia) we saw an impressive variety of flowering plants on the trip to Snowbird. Encore, encore!
The concept of a garden of native plants in Asheville arose principally from the enthusiasm of Bruce and Tom Shinn. The concept was to collect, preserve and display native plants and to educate the public about the beauties of the native flora of the southern Appalachian Mountains. The Shinns, with like-minded members of the community, the editor of the Citizen Times and the Asheville Garden Club convinced the Board of Trustees of the University of North Carolina at Asheville to set aside 10+ acres of the land recently acquired for the University; this land to be developed as a botanical garden by the University Botanical Gardens of Asheville Inc., a newly formed group of volunteers.

The property was made available in 1960. There followed intense activity for much of the land had grown up in briars and brush which had to be removed before any planting could begin. Doan Ogden, a local landscape architect, prepared a beautiful design for the gardens which has been the basis for the subsequent development. A service road was soon contructed and the principal walkway through the gardens (the Creighton Trail) with its impressive stone wall was built.

In subsequent years many structures were built to exemplify buildings typical of the mountain culture, to enhance the aesthetic appeal of the Gardens and to provide shelter for maintenance equipment. These included a cabin, a springhouse, bridges, a gazebo, a garden for the blind and most recently a visitor's center with meeting room, library, office, solarium and a gift shop.

During these same years, native plants were collected, donated and purchased to be planted in the Gardens. These plantings were made in as typical natural settings as possible to attain the goal of "natural gardens". This activity continues today, for the Gardens are continually changing. Some plants grow invasively and need to be controlled, others disappear and need to be replaced and there is a constant effort to add to the collection to make it more nearly a comprehensive representation of the flora of the region. Thus there is always need for volunteers to keep the Gardens a dynamic place for the enjoyment and education of the public.

Today the Gardens contain about 800 species not including the mosses, grasses, sedges and rushes, some of which are present in the Gardens. There are many features that are appealing to the casual visitor, to the lover of nature and to the professional botanist. The sunny meadows, sheltered cove, sparkling streams with their bridges and quiet pools and the shady walks under magnificent trees all contribute to this appeal.

Yet the raison d'etre for all this beauty is to concentrate typical native plants in a small area. Species that might
require miles of hiking and/or driving to be viewed in the wild are found here within a few feet or yards of each other so that they can be easily enjoyed and studied. Just to illustrate the possibilities, a relatively small number of the plants in the Gardens have been selected and are presented here. They are Oconee Bells, Galax, Golden Club, Marsh Marigold, Pickerel Weed, Water Shield, Water Lily, Swamp Pink, Shooting Stars, many species of Ferns, several species of Trillium and of Magnolias, Witch Alder (Pothergilla), Green Dragon, Skunk Cabbage, several species of Wild Roses, several Evergreen Gingers, Twin-leaf, Celandine Poppy, Dwarf Larkspur, Golden Seal, several species of Bellworts, Yellow and Pink Lady Slippers, Water Cress, Forget-me-not, Large Whorled Pogonia, several species of Pitcher Plants, Swamp Rose Mallow, Turtle Heads, Lobelias and Gentians.

The Gardens were created and are maintained entirely by volunteers. Its income is derived entirely from plant and gift sales and from memberships, donations and legacies. Under these circumstances help is needed in all of these categories. Under these circumstances, too, there is great satisfaction in playing a part in the maintainance and enhancement of this botanical gem.

RECORER'S REPORT, FEBRUARY THROUGH APRIL 1996. ERIKA S. PARMI

As a prognosticator I get a passing grade only! My prediction in the last SHORTIA for a great spring for wild flowers was fine, except in general on Botanical Club field trip days the flowers were not yet in bloom, or the hike was cancelled.

Pearson's Falls on March 22 was cancelled due to storm damage and Table Rock (only the leaders turned out) on April 1, Jones Gap on April 26 and Tanbark Tunnel on May 6 were cancelled due to rain.

The two trips south to the Pacolet River, however, were a treat with masses of trillium (white and red Trillium erectum, T. cuneatum, T. grandiflorum, and T. cernuum). Most of the other early March and April trips yielded only a fraction of the numbers of species we usually see in bloom. Even the reliable Oconee Station Falls trip was not up to par. Due to the late spring we were lucky on the Holmes Educational State Forest trip where we saw masses of the early blooming trout lily (Erythronium americanum), bloodroot (Sanguinaria canadensis), and spring beauty (Claytonia caroliniana). The plants along the Givens Estates trails also seemed to be waiting for warmer weather.

By the end of April the plants were catching up and we had nice displays on the Snowbird trip. Now as I write this on May 6, the trees have leafed out almost completely and the rain showers and warmth of the season finally have arrived after a long, cold winter and spring.
Liquidambar styrachiflua, better known as SWEET GUM, is a member of the witch hazel family, Hamamelidaceae, which also includes Fothergilla, (witch alder). The term liquidus means fluid and the arabic ambar alludes to the fragrant juice or resin which exudes from the tree when cut. Hardened clumps of this resin are chewed by some people and commercially it is used in the preparation of chewing gum.

Sweet gum is found throughout North Carolina in the coastal plain, piedmont and mountains up to 2500 feet. It prefers moist, rich areas usually in the neighborhood of red maple and black gum. This tall and beautiful pyramidal tree grows to an average height of 75' but has been known to reach 150' with a diameter of 4 to 5'.

Its distinctive star-shaped leaves are palmate with 5 to 7 pointed lobes and are fragrant when crushed. In the fall the foliage turns a deep crimson making this tree a handsome and popular ornamental.

By late March, but usually in April after the leaves come out, clusters of small greenish flowers appear. The long spikes or racemes of the staminate and the spherical heads of the pistillate flowers occur separately on the same tree and are not too visible among the leaves.

The fruit is a spiny pendulous ball made up of many woody, beaked capsules containing tiny winged seeds. These balls are prized for craft work but are an annoyance to gardeners who object to the litter.

In the winter some trees are easily recognized by the corky wings or ridges on the branches. The pendulous fruit often persists into the winter.

The fine grained wood of the sweet gum makes it a valuable timber tree. Veneer from the tree takes a high polish and is widely used for furniture. When stained the wood resembles expensive hardwood and is used in interiors and all kinds of wooden ware.
I am preparing this column during the first week of March and the seed catalogues are upon me, but two books are on my mind. My friend Charles Nelson (until now of Dublin, Ireland) and Wendy Walsh (illustrator) have issued Flowers of Mayo, a book that you would covet. Only 150 copies were published in 1995, and they now sell for $715 US. This is a beautifully crafted book whose value can only go up, especially because of its art work. And now to a more accessible book: Ray Desmond's Kew: the History of the Royal Botanic Gardens. This book reflects the rich botanical history of the greatest herbarium/botanical in the world. Read about how that autocrat W.T. Thiselton-Dyer treated Beatrix Potter. The book is well illustrated and is THE definitive history.

I hope that anyone interested in plants will have an opportunity to visit Kew (just outside London on the Thames River) and walk through their gardens, remembering Wakehurst is also part of Kew. I for one spent most of the time in the glorious herbarium with its red spiral wrought-iron stairs that took me to the herbarium cases.

But we are in Brevard and watching spring unfold. Buds are swelling, bulbs are blooming, and some plants are greening. I am pleased with our witch-hazel which came into full bloom in mid-February. This shrub is one of the first that I planted: the red-flowered Hamamelis X intermedia 'Dianne'. Later in the season it will be joined by our Fothergilla gardenii (which came from Fry's Nursery) and Betty's joy, a Liquidambar styraciflua tree from Lowe's.

This introduces my featured family, the witch-hazel family (Hamamelidaceae). The three aforementioned plants are members of this family, the latter two being natives of North Carolina. The family, composed of trees and shrubs, has 30 genera (13 monotypic) and about 90 species, widespread in both the Old and New World, in the subtropics and warm-temperate regions. The witch-hazel family is loosely knit, with many isolated genera. The witch-hazel is the last (end of the year) or first (beginning of the year) to bloom. The genus is represented by Hamamelis virginiana in our area, and I would like to obtain a plant for our gravel path. This would give me three of the four native species of North Carolina: The other being Fothergilla major.

A related family, Platanaceae, has one genus Platanus with 6 to 7 species from the eastern Mediterranean region to Himalaya Mountains and from Canada to Mexico. I planted a sycamore (P. occidentalis) which I bought from WalMart for $2.00 at the end of the season. Most believe that these two families are related, but neither can be derived from the other. The flowers of Platanus are more primitive, but the wood is more advanced, than the witch-hazel family.
Although some of our regional guide books describe both yellow- and pink-flowered plants as belonging to the genus *Gerardia*, it makes things easier if we follow the more recent taxonomic treatment that places both groups in other genera—namely, *Aureolaria* and *Agalinis*, respectively. It is the former, all known as False Foxgloves, that we are considering here.

The first three species are erect perennials, sparingly branched if at all, bearing 1½" slightly irregular campanulate flowers with five spreading lobes, in terminal racemes. The upper leaves are small and for the most part entire; the principal lower ones, which afford the best means of distinguishing species, can at the same time be annoyingly variable.

Downy False Foxglove (*A. virginica*) has a soft, grayish pubescence. Its leaves have a few large lobes below the middle and smaller ones above, all blunt. Smooth False Foxglove (*A. laevigata*) has a smooth, shiny green stem, and the main leaves are entire or at most have a few shallow lobes or teeth. Yellow False Foxglove (*A. flava*) also is smooth-stemmed but it is glaucous and purplish. The leaves are pinnately lobed or cleft into pointed segments. Its pedicels differ from those of the other two species in being longer than ½" and curved rather than straight.

Our other representative is Fern-leaved False Foxglove (*A. pedicularis*). This is a much-branched annual with axillary flowers, and is instantly recognizable by its sticky glandular hairs. The leaves are smaller and once- or twice-pinnate with irregularly toothed margins.