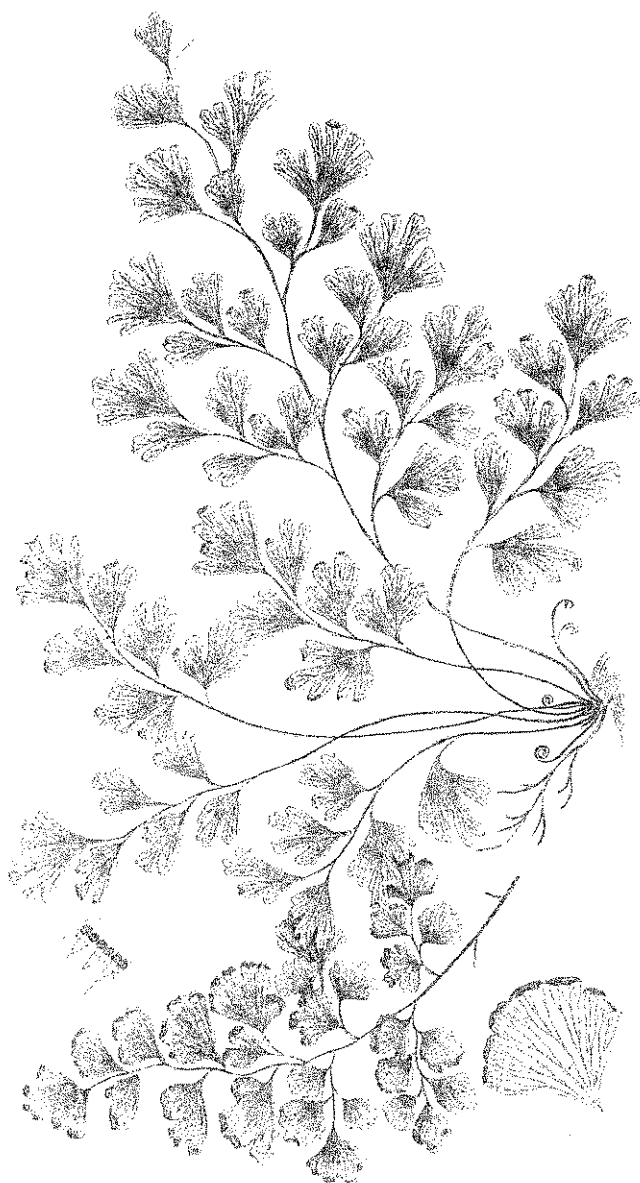


NORTH CAROLINA *wild flower* PRESERVATION SOCIETY, INC.



Maiden Hair
Adiantum capillus-veneris

FALL 1991
VOLUME III, NUMBER II N.S.

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NEWSLETTER
of
North Carolina Wild Flower Preservation Society

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Cover: This print had been removed from an antique book before it was offered for sale at a used book store. It was probably taken from an early nineteenth century English fern text. Although we have used it previously to illustrate a fern article, we chose to repeat it because this species, *Adiantum capillus-veneris*, Southern or Venus Maidenhair, is one of the plants which will be an important feature of our 1991 fall trip.

Birth Announcement

We are delighted to announce the birth of two babies to members of our NCWFPS Board Members: a daughter, Alanna, to Tom and Elvira Howard and a son, Forest, to Jeannie and Brian Kraus.

Members are sad to learn of the death of Mary Pyne, wife of George and mother of Milo. All three Pynes have been long time active members who have contributed their knowledge to this organization.

PRESIDENT'S MESSAGE

The North Carolina Wild Flower Preservation Society has a tradition of fiscal responsibility, and that has been reflected in our membership dues. In fact, the Society is one of the least expensive conservation organizations in the state, and on a national level, one of the least expensive native plant societies.

I became convinced that the Society offers a "bargain" after Lionel Melvin and the late Russell Southall invited me to join some years ago. As we became involved in the Society, Adrianna and I decided to take on the real bargain—a lifetime membership. Now, after serving on the Board of Directors for several years and observing the inner workings of the organization, I fully appreciate the value of membership.

My view of the Society was enhanced when I attended the national conference of native plant societies hosted by the National Wildflower Research Center and Lady Bird Johnson. Five years at the native plant conference at Cullowhee and over two years of involvement in the Eastern Native Plant Alliance have added more to my perspective. Nearly everyone I meet is amazed at what our Society accomplishes and offers for the level of our dues.

Our *Newsletter* is consistently praised as one of the best in the country. In fact, I am frequently asked, "How much more do I have to pay to get your newsletter?" when I tell them our membership dues. The quality of the *Newsletter* alone makes it very easy for me to represent the Society at conferences. Having worked with Jane Welshmer, Linda Lamm, Jeannie Kraus, and Jean Stewart (along with many other recent and former contributors), I know why the *Newsletter* is one of the best—it starts with the commitment of the people behind it. The *Newsletter* is the voice of the Society, and it is the lifeline that keeps us all linked together.

Visitors and observers from outside are also impressed with the quality of our spring and fall outings. They also typically ask how we can offer outings such as ours with only a nominal fee. Many other organizations charge fees of 15 to 20 dollars for outings like our trip to the Green Swamp this fall, in addition to dues that may be 100% to 200% higher than ours.

During my time on the Board of Directors, I believe the Board has maintained the tradition of fiscal responsibility that we inherited from our predecessors. Our Treasurer, Gretchen Cozart, deserves much of the credit for keeping us solvent; we are all "indebted" to her for her years of devoted service. Last fiscal year, 1990-91, we almost came up short on our funds, however. Without the delicate balancing efforts of Gretchen and a couple of gifts by members of the Board, we would have been into deficit spending. This year we are watching our spending closely, but the cost of meeting our responsibilities and obligations continues to rise and the budget is tight.

The conclusion of the Finance Committee is that we are staring at an increase in our dues for 1992. We will be discussing this proposal this fall and expect to announce a new dues schedule next spring. We hope that we can find a compromise that will keep us solvent for several years but not cost us any of our renewals.

A major part of our budget goes into the *Newsletter*, specifically printing and postage. The Board has resolved not to cut back on the *Newsletter*, since it is

the lifeline of the organization. Since we have been unable to relieve Jean Stewart otherwise, the cost of all of our mailings is going to increase further. We are contracting out the work that Jean has performed as a volunteer for many years, and that will add more to our operating cost.

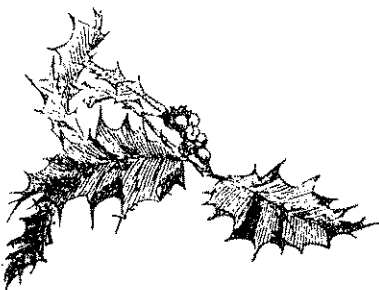
Our membership has been growing slowly, but not at a rate fast enough to offset the rising expenses and obligations of the Society. We need to continue to grow in order to remain financially solvent, and we need to keep all of our current members. Please stay with us and help us to grow. I'm not going to use any of the cliché phrases about how much we value your membership...,but I am going to ask you to convey the benefits of membership to others.

Only a small segment of the people of North Carolina even know that the Society exists, even if they share our commitment and interest. Share your enthusiasm and pride; we are the second oldest native plant society in North America. Our members have a strong tradition of sharing exciting outings and the pleasures of learning about our native plants in their natural habitats and in our landscapes.

Newspaper articles and other publicity help with name recognition, but personal communication is the best vehicle for recruiting new members. Most of the members I know personally were recruited by other members. I was recruited, and I have recruited many others by showing them a *Newsletter* and/or inviting them on one of our outings. Many of the best friends I have are in the Society; two of the best I will ever have invited me to join, and I will always be grateful.

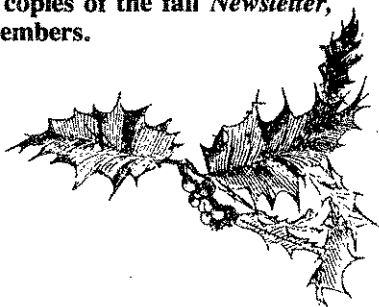


Benson



CHRISTMAS IS COMING!

The gift of a membership in the NCWFPS is an inexpensive and personal gift. Share the joy and invite the recipient to come to our spring meeting/outing. We will print a few extra copies of the fall *Newsletter*, so they will be available to send to new members.



NCWFPS—LONG-RANGE MEETING AGENDA

Recommended by the Program/meetings Committee adopted by the Board of Directors, February 24, 1991

FALL 1991	Green Swamp	September 28-29
SPRING 1992 April 24-26	Secrets of the Far West—far western North Carolina, that is—led by Alvera Henley, NCWFPS member and experienced leader at the Spring Wildflower Hiking Week at Fontana Village...see detail below.	
FALL 1992	Scotland Co. Gamelands & Lumber River	
SPRING 1993	Stone Mountain State Park & vicinity	
FALL 1993	Uwharrie Mountains	
SPRING 1994	Nags Head Woods & Buxton Woods, Outer Banks	
FALL 1994	The Carolina Bay Lakes; Jones Lake & Salters Lake	
SPRING 1995	Charlotte & Crowders Mountain State Park	

All suggestions welcome. Write to or see the president or program chairman.

SPRING 1992 MEETING April 24-26, 1992 MARK YOUR CALENDAR NOW!

We are making plans with Alvera Henley of Newland, NCWFPS member and experienced Fontana Village Wildflower Hiking Week leader, and the staff at Fontana Village for a spectacular mountain wildflower outing. This area, with Joyce Kilmer Memorial Forest, Slickrock Creek, the Great Smoky Mountains National Park, and hundreds of special less-known treasures, is more than worth the long drive.

Fontana Village has offered us special rates and accommodations. Facilities include covered campsites, rustic cottages, deluxe cottages, and The Inn.

We also plan to invite the native plant societies from Alabama and Tennessee to join us.

*****For those of you who like a fall preview of the beauties of the area, the Eighteenth Annual Fall Colors Hiking Week is scheduled for October 20-26, 1991. For information, call the Fontana Village Resort at (704) 498-2211 or (800) 849-2258.

LIONEL MELVIN

The NCWFPS, Inc. meeting the first weekend in May in Greensboro was special, because it was in honor of a very special member of the organization, Lionel Melvin.

Often called the most knowledgeable taxonomist in the state, he has graciously shared that knowledge with all who have passed his way. This has been his pleasure, and this has been our good fortune. Who among us has a garden without the "Melvin influence"!

For years his nursery at Pleasant Garden has been a mecca for people in search of our native plants. But ever the perfectionist, Melvin was interested in plant families, and at one time grew all Azaleas native to North America.

Vacation time to him has been searching remote areas of the state, and especially the eastern section of his boyhood, for the rare and endangered species of plants. If and when found, they became his pot of gold. He grieves, with the rest of us, over the destruction of the vast acreage of plant habitats.

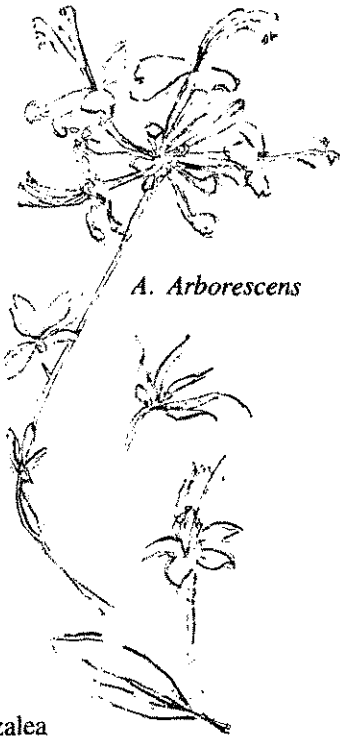
He is a mighty force behind the protection of native plants, just as he has been

behind the success of the NCWFPS. Through the years he has propagated plants, and shared them with serious gardeners. Here in Greensboro our public parks and gardens, as well as private gardens, are enhanced by Melvin plants.

Lionel Melvin, president of our organization during the early years of 1956-58, has been and continues to be, an inspiration to each of us. We salute you, Lionel, with deep appreciation!

Nell Lewis

Note: The staff regrets that we have been unable to find anyone who attended the spring meeting in Greensboro willing to write about it. We were unable to attend but have heard from others that it was a tour through beautiful gardens that are developing with knowledge, expertise, artistic talent, and inspiration by the devoted volunteers who have given countless happy hours of heavy labor. They are setting a commendable example for all North Carolina communities. We hope to have a list of these and other state native plant gardens for our next issue. Please send.



GET A HANDLE ON PRONOUNCING SCIENTIFIC NAMES

by Larry Mellichamp

UNC Charlotte Botanical Gardens, Biology Department, Charlotte, NC 28223

Whythesolongnames? Whatever your reaction to the preceding "word" is probably your reaction to Latin names of plants. Did you try and figure it out, or did you just take one look and say: "not for me!"

Scientific names can, of course, be difficult to pronounce and understand, especially if you don't use them every day. You probably accept that the two-part name of each plant—a genus and a species name—is a necessary component of botanical science and that they are widely used and understood by professionals; but you hesitate to use a name when you want to talk with someone because you're afraid you'll say it wrong. Take heart, you are not alone. Just remember, Linnaeus began using this binomial nomenclature in 1753, not because he wanted to make things harder for you, but because Latin was the language of science and medicine (as well as religion and other fields) at the time. Believe me, his two-part name for each species was a great simplification over the multi-word phrase names used earlier (sometimes involving a dozen or more Latin words, literally a mini-description of the plant). Today, Latin allows knowledgeable people around the world to communicate about plants, no matter what their native tongue, and without the confusion of common names.

Actually Latin names are not as difficult to pronounce as you might think. After all, most of the vowel sounds are similar to those in English words (that is, with long i and e); and you can think back to Latin names you already know when trying to say a new one, such as the familiar *Rosa*, *Tulipa*, *Astilbe*, *Geranium*, *Hosta*, *Spiraea* (remember this one for later!), *Salvia*, *Sedum*, *Lobelia*, *Cyclamen*, *Crocus*, and many more. There are long or short "a's," "u's," etc., and enunciation is controlled by these sounds. The other thing you can do is break the word into syllables, just as you would an English word, putting a vowel between two consonants and trying to sound them out. English has a great many difficult words and pronunciations, so we shouldn't let the fact that a Latin word looks different give us the notion that it is more troublesome to pronounce. I get more variations on "Mellichamp" than most Latin names I hear people try to pronounce.

Latin names still give us problems, just because they are usually so unfamiliar. How do you learn to correctly pronounce a strange scientific plant name? That question is analogous to asking someone how to get to Chapel Hill. You ask three different people and you'll get three different answers. It all depends on where you are coming from, how well you can remember details, your past experience, how much time you have, and whether you can practice. My advice is that you ask three experienced people, and take the best two out of three pronunciations. Much of the way people say Latin names depends on their experience—how they first heard it pronounced. You can apply various rules of Latin pronunciation, but there will always be variations and differences of personal preference. There are two ways of pronouncing Latin: the so-called original Roman way, practiced by Latin scholars; and the modern adaptation more-or-less to the speech people use today. We tend to "Englishize" Latin words to make them easier for us to pronounce; and since not all scientific names originally come from Latin, we have

to "Latinize" these words to fit our way of talking. For example, the genus name for pine is *Pinus*. In strictly correct Latin you would say *PEA-noose*; whereas, we tend to say *PIE-nus*. The latter is certainly easier to remember. [In this article, capitalizing a syllable indicates it's the one to stress.]

I encountered frustration as an undergraduate student taking my first systematic botany course where we had to identify wild species using the "Guide to the Flora of the Carolinas" in the late sixties at UNC Charlotte. I had not paid much attention to pronouncing scientific names before, but I did not hesitate to try. As usual, you learn more from your mistakes; and I learned a lot! My first eager effort was to pronounce *Cardamine* (spring cress) as "CARD-amine," by referring back to the more familiar word "histamine." You wouldn't think of saying "hist-AM-in-ee," but that's exactly how you pronounce *Cardamine*. One of the rules of Latin is to pronounce as many syllables as you can, by pronouncing every vowel. So that extra "e" on the end gets pronounced. There are significant exceptions, as we'll see, but that's a good rule to start with. Practice on: *Silene*, *Chelone*, *Anemone*.

The second rule of pronunciation requires you to break the word into syllables, which can be a feat in itself, and then to enunciate the third from the last (the antepenultimate) syllable, unless you know better. That is, you have to decide which syllable to put the emphasis on. Thus, *Cardamine* would be pronounced "car-DAM-in-ee," not "car-da-ME-knee." There are many familiar examples you can recall, such as kris-ANTH-e-mum (*Chrysanthemum*), LIL-e-um (*Lilium*), ah-NEM-on-ee (*Anemone*), de-FIN-ee-um (*Delphinium*), PRIM-you-la (*Primula*), ger-AIN-ee-um (*Geranium*) and cam-PAN-you-la (*Campanula*). See how funny they would sound if you put the emphasis on the second-from-last syllable. There are plenty of exceptions to this rule, though, both familiar and unfamiliar. Try *Rho-do-DEN-dron*, *Cor-e-OP-sis*, *Hi-BIS-cus*, *Ver-BE-na*, and *Por-tu-LA-ca*. See how these would sound if you tried to enunciate the third from last syllable. The rules are: There are as many syllables as vowels; words of two syllables are stressed on the first; of three or more syllables, on the next-to-the-last (penultimate) if the vowel in this syllable is long; if this vowel is short, accent may be on the third from last (antepenultimate). How many of the above names follow the rules?

So, how do you know which is the correct way on an unfamiliar name? You don't, until you hear someone pronounce it and then accept it for yourself as sounding right. Take the evening primrose genus for example, *Oenothera*. I learned to pronounce it "een-oh-THEAR-ah," but was shocked to later hear a British botanist say "ee-NOTH-er-ah." Which is correct? The third from the last syllable would be in keeping with the rules, but here in America most experts emphasize the second from last in this case. There are many examples of this. Is it just tradition, or what? Perhaps it has to do with making the words sound most like they would as ordinary English words. I recently worked with a high school student on tree identification. He had taken three years of Latin and he pronounced plant names somewhat differently from me; he was applying rules that I didn't even know. We almost had a breakdown in communication.

Two examples of mispronunciation that hurt my ears the most involve *Crassula* and *Clematis*. These are very common generic names, and frequently used. The

“correct” way is to emphasize the antepenultimate syllable in both: CRASS-you-la (not crass-OO-la) and CLEM-a-tiss (not cle-MA-tiss). Think about it.

Before we get too far away from the British style, let me point out another difference upheld by the Atlantic Ocean (but often heard in Canada). It is the pronunciation of “ch” as a hard “k” versus a soft “ch” as in “church.” Americans tend to prefer the hard sound. Thus in Britain you will hear *Chionanthus* (fringe tree), *Cheilanthes* (hairy lip fern), and *Chenopodium* (pigweed) with a “ch” sound as in “chutney”; while we in the States would be more familiar with “ch” as in “chiropractor.” But, then we tend to say *Chaptalia* (sun bonnets) and *Chelone* (turtle head) with a soft “ch” (as in chapstick and cheese). Where is consistency? Makes things harder, doesn’t it.

These two rules take care of many ordinary pronunciations. But here are additional cases you will encounter. Many species are named after people. There are two situations: generic names and specific names. It would be nice if we could pronounce the Latin plant name so as to preserve the name of the person being commemorated. Sometimes that works well, as in *Lobelia* (after the 17th Century herbalist l’Obel), *Tradescantia* (after 17th C. royal gardener John Tradescant) and *Sarracenia* (after 18th C. Quebec botanist Michel Sarrasin). But what about our silverbell tree, *Halesia*. It was named after the Rev. Stephen Hales, yet we usually say it hal-EES-cia, rather than HALES-ee-ah. And the beautiful garden perennial stoke’s aster: some say stoke-EES-cia rather than STOKES-ee-ah. Would people like to know about Dr. Jonathan Stokes? Or would they even know what name you were saying? When you say the words the way they look, you often lose something.

Similar variations concern the hard and soft pronunciation of the “ti” of such genera as *Stewartia*, *Tradescantia* and *Sabatia*. We say stew-ARE-tee-ah (or stew-ART-sha), and trad-es-CAN-tee-ah (or trad-es-CANT-sha), but sa-BAIT-she-ah (or sa-BAIT-sha); can the “ti” go either way in every case? Or should we try and preserve personal names?

The second situation deals with species names ending in i or ii, like *Senecio smallii*, *Lilium grayi*, and *Sarracenia jonesii*. Those i’s are added to Latinize a non-Latin word and they should be pronounced, both of them. Thus: SMALL-ee-eye (not just SMALL-eye), GRAY-eye (the y counts as one i), and JONES-ee-eye (not joan-ESS-ee, as I have heard). Here preserving the person’s name, with one or two “eye” sounds added, should be the rule. The tendency among inexperienced people is to pronounce only one “eye.”

Sometimes, given alternative ways of emphasizing syllables, you would want to preserve a component of the name that refers back to a structure for which the name was chosen to reflect. For example, in the white-top pitcher plant *Sarracenia leucophylla* the species name means “white leaf”) should be pronounced lew-co-PHILL-ah to preserve the Latin word “phyll” that means leaf (rather than saying lew-COPH-ill-ah as the antepenultimate Latin rule would have). And in another example, the genus of filmy fern *Trichomanes*, so-called because it has a hair-like, or trichome-like, central vein in the spore capsule, should be pronounced trike-OHM-an-knees, rather than trike-oh-MAIN-ees.

Now, for the important exception I alluded to earlier, that is, when to NOT



Clematis virginiana

enunciate every vowel. There are plenty of examples in Latin, just as in English, of diphthongs: a double vowel pronounced together as one. The most important diphthong in Latin names is "ae," though you will find plenty of examples of "eu" (*Eupatorium*), "oe" (*Coelogyne*), and here you do pronounce all of the latter vowels sea-LODGE-eye-knee, a tropical orchid), etc. The first place you encounter "ae" is in plant family names: *Asteraceae*, *Rosaceae*, *Geraniaceae*, etc. The "ae" is pronounced invariably as a long "e," as in "bee." (The classical Roman pronunciation would be as a long "i," as "eye.") So, as-ter-A-see-ee, and ger-ain-ee-A-see-ee. All family names end in *-aceae*, which is pronounced -A-see-ee (not A-see-ah), but as if it is written "a-c-e" and given the pronunciation of those exact letters). There are countless examples of generic and

species names with the "ae" diphthong: enchanter's-nightshade, *Circaea* (sir-SEE-ah); white-cedar, *Chamaecyparis* (came-ee-SIP-ah-rus); and hawthorn, *Crataegus* (krat-EE-gus). Do not be confused by the occurrence of "ea," which is NOT a diphthong normally, in such genera as New Jersey Tea, *Ceanothus* (see-ah-NOTH-us) and chestnut, *Castanea* (cass-TAIN-ee-ah), not cass-tan-EE-ah). As a self-quiz on this rule, try to pronounce the family of climbing fern: *Schizaeaceae*. [By the way, all family names are plural, and should be accompanied by plural verbs. For example: The *Schizaeaceae* are a family of ferns.] (answer: sky-zea-A-sea-ee).

I hope this brief lesson has helped. I'm sure you will know more examples, exceptions and variations than I have listed here. I realize it is tedious to try and put in writing the pronunciations of words and syllables, but if you are interested, you will spend many hours reading and trying to learn them. Find a willing companion, get a copy of Dr. Ritchie Bell's wildflower book (for the pictures!) and practice saying the names.

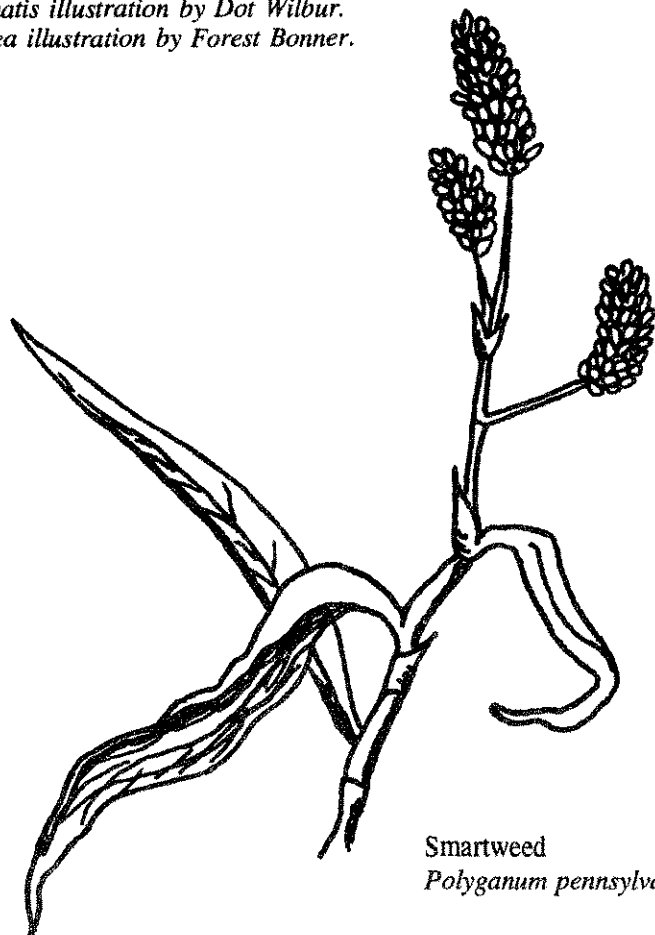
These references will be most helpful:

- Bailey, Liberty Hyde. 1933. *How Plants Get Their Names*. 181 pages. [Clear, easy to read, interesting; names with pronunciations.]
- Fernald, M.L. 1950. *Gray's Manual of Botany*. [gives pronunciation and meaning of generic and specific names of northeastern plants.]
- Johnson, A.T. & H.S. Smith. 1972. *Plant Names Simplified*. 120 pages. [Names, pronunciations and meanings.]
- Smith, A.W. and W.T. Stearn. 1972. *A Gardener's Dictionary of Plant Names*. 391 pages. [very good; extensive lists of pronunciations.]

Dr. Mellichamp is head of the Biology Department at UNC Charlotte, Professor of Botany, and distinguished lecturer. He will speak on his recent trip to Africa at the Botanical Garden in Chapel Hill on the evening of November 22.

Clematis illustration by Dot Wilbur.

Azalea illustration by Forest Bonner.



Smartweed
Polygnum pennsylvanicum

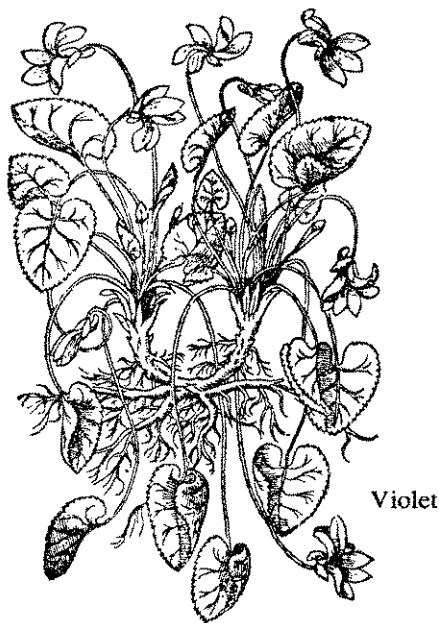
1991 ENPA MEETING

The North Carolina Wild Flower Preservation Society and the North Carolina Botanical Garden cohosted the Annual Meeting of the Eastern Native Plant Alliance on July 21-24. Auxiliary hosts for special events were Duke Gardens, Niche Gardens, the N.C. State University Arboretum, and the Triangle Land Conservancy.

Participants from as far away as Ontario, Canada, participated in presentations and discussions on invasive exotics, changing beaver and deer populations and the effects on native plant populations, the ecological impacts of harvesting longleaf pine straw, and land conservation how-to's. A major emphasis of the meeting was communication among the organizations represented, including coordination of efforts to lobby for proper regulation of the collection and sale of native plants. Truth in advertising and consumer awareness were also discussed.

The last day was used for an all day field trip led by Julie Moore and Benson Kirkman. In spite of the heat and an encounter with yellow jackets, the perspiring participants enjoyed tours at the White Pines Natural Area, Juniper Springs Natural Area (a disjunct stand of Atlantic white cedar with a population of the rare *Lindera subcoriacea*), and an excellent longleaf forest. The field trip provided an opportunity for discussions of many of the topics covered in the meetings.

Everyone was impressed with the beauty and biological diversity of the sites, even on one of the more miserable days of the year. One visitor remarked that he always concentrated on the mountains and the coast on his many visits to North Carolina, but now he was going to have to consider exploring more of our "secrets" in the middle of the state.



COLLECTION OF PLANTS FROM THE WILD:

One Propagator's View
by William E. Brumback

Native plants are a "hot" item these days in the horticultural trade, and the demand for wildflowers is increasing each year. A large percentage of these plants are being dug from their natural habitats for both retail and wholesale markets. This practice raises questions about the effects of wild collection and the public's responsibility for its perpetration.

Collection of native plants by nurseries for sale to the public has long been a matter of concern. Reports of unscrupulous commercial dealers decimating local populations of cactus in Arizona, terrestrial orchids in Michigan, carnivorous plants from the Gulf states, and woodland species from the mountains of North Carolina show that the practice still continues. Furthermore, over-collecting has recently prompted several states to enact native plant laws forbidding dealers to sell certain species across state lines.

Collection of plants is an emotional issue, and it is tempting to condemn all such acts outright. However, let's put this issue in perspective: many more native plants are lost each year by development and habitat destruction in the name of "progress" than are lost by commercial enterprise. Certain plant groups are dug more often than others, and we should definitely be concerned about the future of these groups. However, compared to destruction by development, the nursery industry is not the major reason for the loss of native plants.

Wild collection, like most issues of substance, is not a right-or-wrong, black-or-white issue. Although collecting of species that are endangered can never be *condoned*, I feel there are instances where commercial harvest of more common species could be allowed without damaging local populations or habitats. Rescuing common plants from development and selling those that would otherwise have been destroyed seems perfectly reasonable to me. Furthermore, I would find it difficult when viewing vast expanses of an abundant species (several acres of hardy ferns species, for example) to say to a collector that he should not cull a small percentage of these plants for sale.

Thus, I do feel that *ethical collection of common, widespread species on a sustained-yield basis is possible*. But what would this entail? In my opinion, collection should be governed by four rules:

1. Collect only common, widespread species.
2. Never decimate a local population.
3. Take only species which have a good chance of survival in cultivation.
4. Maintain the population on a sustained-yield basis.

These ethical standards put a great deal of responsibility on the collector. He must obtain permission of the landowner, census the population, harvest only a small percentage over the entire population, and allow enough time for the population to regenerate to the original level of the census before culling again. It assumes that the collector is knowledgeable enough to know that the desired species is not rare either nationally, state-wide, or locally. It further assumes that he is conscientious in his assessment of population size and in his harvest of a species from an area. Finally, it assumes that the collector has a good idea of

the plant's growth rate and regeneration capabilities. Some species may need only a year or two to regenerate to their original levels either by seed or by vegetative means. Others, such as native terrestrial orchids and trilliums, may need seven to 15 years to replace themselves from seed. Even if one dealer is ethical, others may defeat the sustained yield program by visiting the same location.

If it seems improbable that some nurserymen would go to the trouble to follow these standards, I agree. Unfortunately, those collectors who would only rescue plants from development or who would pursue ethical practices are under suspicion from the start because of atrocities committed by unethical collectors. Decimation by unscrupulous dealers has tarred all with the same brush, and now even the conscientious are thought of as guilty until proven innocent. Short of actual monitoring, it is difficult to know who is principled and who isn't. Should some sort of regulating body be set up to approve and monitor collectors? Should there be a "seal of approval" for wildflower dealers? If so, who would run it? How would it be funded? And do we really need it in the first place?

A simple solution to this complicated issue is for gardeners to purchase only *propagated* plants. Buying propagated plants assures that no local populations of a species have been decimated in order to bring a plant to your garden. Further, propagated plants are often better adapted to cultivation than plants that have been taken from the wild. Finally, propagation is the only way to obtain selected forms of wild species.

However, there's a catch—the shoe fits just as well on the gardener's foot as it does the nurseryman's: plants are almost always more expensive to propagate than to collect. If nurserymen must begin production of native plants, gardeners who want to be ethical must be willing to support those nurserymen who are propagating by paying more for the plants. Moreover, gardeners must not succumb to "plant lust" by purchasing those coveted species which are not available through propagation means.

The question then arises, "How can I tell if the plants offered by a wildflower dealer are collected or propagated?" The answer often lies in the catalog itself. Although some nurseries are still blatant about stating that their stock is wild collected, apparently feeling that this is an advertisement for quality, recently other wildflower dealers seem to be less open about their sources. Sometimes you will see the phrase "hardy, northern stock" or "northern grown" or "(name of state) grown." Usually this means that the plants in the catalog are wild collected. Another term used is the ambiguous "Plants obtained by thinning of native stands." How do you know how thin the native stands are after the collection?

One way to tell if a nursery is ethical is to look at certain species and the prices charged. Groups of plants most likely to be collected include native terrestrial orchids; trilliums and other lily family members; cacti (primarily non-hardy western species); carnivorous plants; and hardy ferns. You should also know that a large percentage of typical eastern woodland wildflowers are often dug and sold for extremely low prices. Examples might include Jack-in-the-Pulpits (*Arisaema* spp.), Wild Gingers (*Asarum* spp.), Trailing Arbutus (*Epigaea repens*), Virginia Bluebells (*Mertensia virginica*), Squirrel Corn (*Dicentra canadensis*), and hepaticas (*Hepatica* spp.). Many sun-loving species—for instance Purple Coneflowers (*Echinacea purpurea*), Black-eyed Susans (*Rudbeckia* spp.), and

Butterfly-weed (*Asclepias tuberosa*)—are economically propagated and, therefore, are less likely to be collected. These plants are available through perennial nurseries as well as wildflower dealers.

When oft-collected groups of plants are offered in a catalog, you should be suspicious as to the source. Terrestrial orchids are the prime example. For the most part, nobody is commercially propagating native orchids because most are slow to increase, have a low success rate under cultivation, and propagation from seed is still in the research stage. The Pink Lady's-slipper (*Cypripedium acaule*) is often offered by dealers, but few, if any, are propagated plants. This popular orchid may be successful the first couple of years, but most gradually die out. At least one nursery, recognizing that success is not likely, has termed it a "short-lived perennial." On the other hand, the Yellow Lady's-slipper (*Cypripedium calceolus* var. *pubescens*) can be successfully grown under cultivation and can be divided every few years; however, most nurseries are not taking the time to build up propagating stock since they can resell collected plants relatively cheaply. Thus, no matter what price is being charged, almost all lady's-slippers and other native terrestrial orchids you find in catalogs have been taken from their natural habitats.

As with the native orchids, almost all the *Trillium* species you see offered for sale are wild collected. *Trillium grandiflorum* seed normally takes two years to germinate under natural conditions, and another three to five years to produce a saleable plant. If several years of propagation time have been invested, no nursery can afford to sell these plants for \$2.50 or less. A more accurate price would be \$10.00.

Hardy ferns are often listed in wildflower dealers' catalogs. Ferns can be produced from spores, but at least two years (and probably more) are needed to produce plants of the size being sold in the nursery trade. In a few instances, tissue culture is being used to produce hardy ferns, but at the present time, most ferns sold in the trade are collected.

In general, low prices on wildflowers that are difficult to grow or need a number of years to propagate almost always indicate that the plants are collected. In reality, prices on many species of native plants should be much higher if they are to reflect accurately and fairly the costs of years of propagation. On the other hand, high prices on wildflowers do not necessarily mean that the plants are propagated; the nursery may simply have high prices.

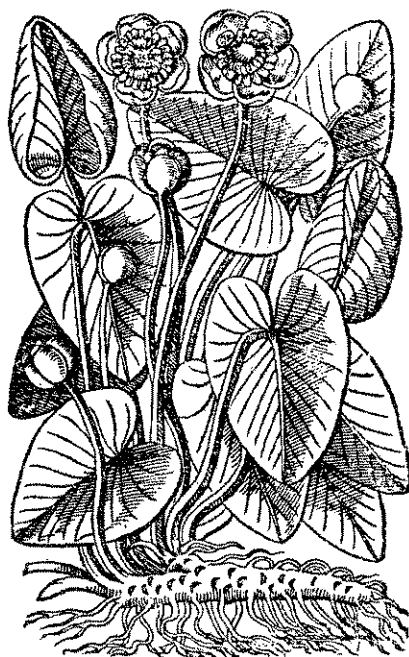
The latest ploy by dealers is what I call "imitation propagation." Using this tactic the nursery hopes that you will think it is propagating all the species in the catalog on their premises. The usual procedure is to buy in or collect wild stock, pot the plants into containers or place them in growing beds, and sell them under the guise of propagated plants. Terms used by this sort of dealer are "nursery grown" or "field grown" or even "container grown." Although these terms could also be used by ethical nurserymen, if oft-collected species are being advertised and you don't see any reference to propagation in the catalog, then be wary. The dealer may be only a middleman for wild-collected plants, who hopes to avoid public scrutiny. In my opinion this type of dealer is more of a threat than the collector who is open about his sources.

There are a number of nurseries that are propagating native plants. They are

usually very proud of this fact, stating it plainly in their catalog. The best example I have seen appears in the catalog of a relatively new Tennessee nursery: "...Every thing is nursery grown from seed or propagated vegetatively from cuttings or divisions. It is against our policy to sell wild-collected plants." Furthermore, the New England Wild Flower Society has recently updated its Nursery Sources of Native Plants and Wildflowers to include a list of native species and their propagated sources. Consult this list, which will be available in May, to be sure of purchasing propagated plants.

In conclusion, I do believe that ethical collection is possible; however to eliminate any doubts as to whether a population of wildflowers may have been destroyed to bring plants to your garden, you should purchase only propagated plants. You can be assured of the ethics of your source and of your own gardening principles.

William E. Brumback has been Propagator for the New England Wild Flower Society for seven years. He works closely with government agencies, conservation groups, and commercial nurseries to help preserve native plants through propagation programs.



Bullhead Lily

BRACKEN: HARMLESS FERN OR DANGEROUS INVADER?

by Mary Burks

Researchers at the University of Wales have found that bracken is not the old friend found in English novels, the romantic cover of the Scottish hillsides, but a plant which poses real threats to man and beast.

"In the United Kingdom, for every two hectares of farming land lost each year to urban development and forestry, one half to one hectare may be lost to bracken." World-wide, "bracken is found in every continent including Antarctica, and is already rapidly colonizing recently deforested areas of Brazil. Not only is it in direct competition with food and grazing plants," but it is a serious threat to health.

"Besides man, there are few species of animal or plant which are territorially dominant and aggressively expanding on a world-wide scale. Such a species is *Pteridium aquilinum* which, ironically, has been granted this unenviable geographical distinction by courtesy of man himself, in his role as deforester and agriculturist over thousands of years...."

"Important research" is "taking place" in Wales "on bracken as a health hazard. The continuing expansion of bracken must increase the risk of its being eaten by grazing animals. 'Bright-blindness' in sheep and 'bracken staggers' in horses are well known conditions caused by bracken poisoning. Researchers have also shown that bracken consumption poses a long-term cancer danger for a wide variety of animals."

"The biochemical pathways—via water, milk and animal products—to human consumption have been amply demonstrated. Researchers at the University of Wisconsin have shown that bracken is a highly carcinogenic plant, the carcinogens being excreted in the milk and urine of bracken-fed cows. Medical researchers in Wales are testing the possibility that carcinogens from bracken are the cause of high overall incidence of stomach cancer and a high death rate in one heavily infested location."

As many of us have observed, bracken is wide spread in Alabama. The fact that it is dangerous has not been publicized and its connection with cancer may come as a surprise. Our universities need to give some time and research to this problem.

Condensed from an article in 1980 British agricultural review journal, *Outlook on Agriculture*. Author, J.A. Taylor, Department of Geography, University College of Wales.

Mary Burks, who edited this, lives in Birmingham, Alabama and is a past president of the Alabama Wildflower Society. Item from Alabama Wildflower Society Newsletter.



FRINGE BENEFITS

by Patricia L. Collins, Director of Education

The native fringe tree (*Chionanthus virginicus*) adorns our Southern woodlands with delicate white, pendulous blossoms in spring, usually mid April through May. Often found in the rich, moist soils along stream banks and coves, it is most at home in the understory, especially in our mixed pine and hardwood forests. The strap-shaped petals hang in graceful "fringed" profusion from the branches which just bore spring's fresh green foliage. These attractive flowers are the basis for many of the plant's common names, such as old-man's beard, grandfather-graybeard, grandsir-graybeard, and grancey graybeard. Whatever name you prefer, it is well worth considering as an addition to your own landscape.

Like holly, fringe tree is dioecious, that is, male and female flowers are produced on separate plants. Since the petals of the male flowers are longer and therefore somewhat showier, some gardeners prefer male selections over the female. While not particularly noted for its fruit production, the female plants do produce dark blue to purple fruit (approximately three-fourths of an inch long) which is relished by birds and other wildlife especially after the leaves drop. The flowers also emit a wonderfully sweet fragrance. Because of the fragrance,

gardeners should plant this near a patio or garden path so all of its many attributes may be enjoyed to the fullest. Early settlers even brewed the bark and used it for an astringent, tonic, and to reduce fever.

Although fringe tree is not widely grown in our own gardens, it was introduced to England in 1736 by John Bartram. It is considered one of the nicest American natives imported to Europe and is frequently found in European gardens. This small tree or large shrub usually has an open rounded shape, often as wide or wider than high. The medium to dark green leaves turn yellow to brown in the fall. Selected specimens even produce beautiful golden yellow foliage. It is somewhat late to leaf out in the spring, doing so just prior to flowering on the previous year's growth. Although found naturally in semi-shade, it will do well in full sun and well beyond its naturally occurring range of the Southeast. Fringe tree may be grown successfully as a very handsome specimen or as a most attractive screen or border planting. When planting, just remember that its ultimate size will be as wide as it is tall.

When considering an addition to your landscape planting, give the fringe tree a try. It will bring beauty for several seasons of the year as well as increasing the food supply for any backyard wildlife you may wish to attract.

This article and illustration were taken from the Spring 1991 Newsletter of Callaway Gardens.



Hepatica

UNCC's PLANT HEAVEN
Gardens filled with native, exotic plants
 by Jan Belk, *The Salisbury Post*

Just south of Salisbury lies a hidden delight for plant lovers.

Although the oldest botanical gardens at the University of North Carolina of Charlotte just celebrated their 25th birthday, many people still don't realize they exist.

"You see the typical university buildings on the campus, but you don't immediately see what the gardens have to offer," says Dr. Larry Mellichamp of the UNCC Department of Biology.

Hurley Park meeting

Speaking at Rowan Public Library Tuesday at the annual meeting sponsored by Hurley Park, Mellichamp gave an overview of what visitors to the garden will find. He also talked about wildflowers and other plant varieties that grow well in Piedmont gardens, giving tips on where to get certain plants and how to make them flourish.

At the UNCC Botanical Gardens, there's something to see year-round, including plants native to North Carolina, exotic plants from all over the world and even the curators' own hybrid beauties and botanical oddities.

The largest and oldest garden, Van Landingham Glen, is one of the leading rhododendron gardens in the Southeast. More than 3,000 rhododendrons are grown there, ranging in height from 2 to 12 feet. During the mid-May peak, the fragrant rhododendrons are spectacular, blooming in shades of red, white and purplish blue.

The 7-acre woodland at Van Landingham Glen also includes trees, shrubs, wildflowers and ferns, among them the favorite azaleas and dogwoods, and all of the native magnolias.

"We've attempted to represent the flora of the Carolinas," Mellichamp says, "from the mountains to the sea." The Glen includes everything from Fraser firs grown in the North Carolina mountains to the oaks and junipers common in sea-level areas.

Sandalwood

In addition, the Glen is perhaps the only garden in the world growing all three North American members of the sandalwood family. These, Mellichamp says, are difficult to grow because they have parasitic roots that require connections to a host plant.

Along with the rhododendrons, May brings meadows to the Glen, with fields of daisies, astors and other plants found in vacant fields and on stream banks across the Piedmont.

Mellichamp suggests meadows for areas that landowners find hard to maintain.

"Instead of mowing it, encourage a meadow," he says. "It's easy and pleasing to the eye."

UNCC's Susie Harwood Garden is more formal, featuring walking paths, a gazebo, arched bridges and a reflecting pool. The garden's exotic and ornamental plants are arranged and displayed with an Oriental theme.

Started in 1979, the 2½-acre area contains non-native plants from around the world. A year-round treat, the garden has an open feel in contrast to the dense

vegetation of Van Landingham Glen.

Highlights are spring bulbs and early flowering shrubs from March to May, summer flowering crape myrtles in the moon garden, and a variety of plants that take on rich colors in fall. Other favorites of the garden include iris, hibiscus, winter honeysuckle, flowering cabbage and the paperbark maple, which features one of the finest barks of any tree.

Hugo rearranged garden

When Hurricane Hugo blew down 25 trees in the garden, most of them a foot in diameter, curators realized they liked the effects of extra sunlight on the plants.

"We never would've done that, but now that it's done, we're thankful," Mellichamp says.

Inside the McMillan Greenhouse are eight rooms, each with a special combination of light, temperature and humidity. Built in 1983, the greenhouse offers a place for research in addition to being a public showplace.

A main feature is the collection of orchids, which range from tiny native plants with almost invisible flowers to large hybrids with colorful blossoms.

By growing such a variety of plants at UNCC's gardens, Mellichamp says that curators not only want to appeal to the public's sense of beauty, but to come up with new ideas for display and new ways to appreciate plants.

During any season, there's something to enjoy about a garden, he says, whether it's at Hurley Park, UNCC or in your own yard.

"Plants can be appreciated year-round—emotionally, spiritually and academically," Mellichamp says. "That's what we try to do at UNCC, to show the beauties, joys and mysteries of nature."



On May 4, 1991 the UNC Charlotte Botanical Gardens celebrated the 25th anniversary of its founding in the midst of one of the finest showings of rhododendron blooms ever. The Van Landingham Glen, started as a garden for hybrid rhododendrons, was begun in 1966 by Dr. Herbert Hechenbleikner in an ideal site on the then new campus of UNC Charlotte. During the intervening 2½ decades Dr. Heck enlarged the small garden to over 7 acres containing some 3,000 rhododendrons. He also expanded his vision of the Glen to include native plants of the Carolinas. We now have over 800 species of indigenous trees, shrubs, wildflowers and ferns that range in the wild from the highest mountains down to the edge of the ocean. Since North Carolina has one of the greatest natural diversities of plants in the northern hemisphere, this is a collection that will continue to grow. The gardens are used extensively for teaching, research and display for the public. The outdoor gardens at UNCC are open seven days a week. The greenhouse is open weekdays from 9 a.m. to 4 p.m. For more information, you may contact Mellichamp, the director, at (704) 547-4055.

UNCC BOTANICAL GARDENS FOUNDER HONORED FOR 25 YEARS' SERVICE

by Nancy Brachey, Staff Writer

Twenty-five years ago, it was just a stretch of Piedmont woods, a vale of pine and oak with a narrow stream bubbling across rocks and pebbles and remarkably loamy soil.

Today the woods are in arm's reach of UNC Charlotte dorms, classrooms and rising parking decks. Yet in the quarter-century since Dr. Herbert Hechenbleikner cast his botanist's eye upon the vale, it has turned into a unique public garden for the Carolinas.

More than 3,000 hybrid rhododendron, 1,000 native azaleas and thousands more native wild flowers, shrubs, trees and vines carpet its slopes and rise above the peaceful trails of the Van Landingham Glen.

Those who love the glen are celebrating its 7 acres of natural beauty these days. Last weekend, they honored Hechenbleikner, its dedicated founder. Through the years, he has done every kind of task the glen demanded since he inspired its creation. He selected and planted, raised money, weeded and studied. He brought in rocks, evaluated plants that thrived, removed ones that didn't. He retired from the university about 15 years ago, but remained the garden's dedicated guardian.

"There's no way to measure what he has done. He really did it on his own," says Dr. Larry Mellichamp, who was Hechenbleikner's student in 1966 and became his successor as director of UNC Charlotte's Botanical Gardens.

But he found Hechenbleikner an inspiring mentor and teacher.

At a reception honoring Hechenbleikner last weekend, Mellichamp said, "You can do a lot with money, but you cannot just pay someone to create a garden. It must be done of your own desire, your own sweat and labor, your own knowledge and your own creative effort."

The glen became the botanical gardens' anchor tenant. Adjacent to it is the 3-acre Susie Harwood Garden, a manicured display of exotic trees, shrubs and perennials that contrasts sharply with the wilder and woodsier Van Landingham Glen. The third component is the McMillan Greenhouse, a conservatory that includes a large orchid collection. All the areas are used extensively for teaching botany and horticulture.

While the glen is often seen as a rhododendron garden, Mellichamp says it is not just a Piedmont garden. Trees, shrubs, ferns, wild flowers and vines represent plant life from all regions of the state, from native red spruce and Fraser fir of the mountains to the coast's yaupon holly and native wild flowers. Mellichamp believes the glen's collection of native ferns is the largest in the South, perhaps the Eastern United States. Even a smooth rock that forms a bridge over the stream is native blue slate.

Mellichamp sees the glen, at 25, as a maturing garden. He is currently encouraging a broader public image for the Botanical Gardens. Last year, a group of supporters called Friends of the Garden formed. Recently, he was surprised and pleased that a man skilled at gardening has volunteered time to tend the Susie Harwood Garden.

And he is working to develop small areas within the glen that will represent

special areas of the state. For example, he is creating a nook in the garden of the same plants that grow at Chimney Rock Park, where people can sit and imagine themselves in the mountains. Even though they're within arm's length of a college dorm.

...

The Van Landingham Glen and Susie Harwood Garden, open daylight hours, are at Mary Alexander and Craver Roads. The McMillan Greenhouse, open 8:30 a.m. to 4 p.m., weekdays, is opposite the gardens. For more information, 547-2364, greenhouse hours. Greenhouse visitors are advised to call first.

Charlotte Observer, May 10, 1991

Dr. Heck is a past president of NC Wild Flower Preservation Society.



Columbine

RECOMMENDED SOURCES FOR NATIVE PROPAGATED PLANTS, SEEDS AND HERBS

We hope the following information will be helpful to gardeners who want to grow native plants without threatening natural populations. To the best of our knowledge, the nurseries included here provide an alternative to wild collecting of native plants by propagating plants or providing seed sources for these plants.

By supporting "conservation through propagation," we can accomplish three things. First, we are tapping into a plentiful natural resource that can enhance our gardens with attractive native flora. Second, we relieve the pressure of over-collection of native species from our natural areas. Third, propagated plants are more likely to survive in your garden than transplants from the wild, and thus propagated plants are a better value.

If no catalog price is listed, we recommend sending a legal size, self-addressed, stamped envelope to receive price list or information.

We suggest, and many nurseries require, that you make an appointment before visiting.

WILDFLOWERS Chapel Hill Area Nurseries

Boothe Hill Tea Co. and
Greenhouse
Nancy Easterling
23B Boothe Hill
Chapel Hill, NC 27514
919-967-4091
Wholesale only.
Seed source also.

Camellia Forest Nursery
Kai Mei Parks
125 Carolina Forest Road
Chapel Hill, NC 27516
919-967-5529

Crossepointe Farm
3605 I-85 North
Intercross Service Road
Durham, NC 27704
919-682-1384
\$1.00 for catalog.
Mailorder spring 1992.

Humphries Nursery
Kathy Humphries
4712 Whitfield Road
Durham, NC 27707
919-489-5502
Wholesale and retail.
No mail order.

Montrose Nursery
Nancy Goodwin
P.O. Box 957
Hillsborough, NC 27278
919-732-7787
\$1.00 for catalog.

Niche Gardens
Bruce and Kim Hawks
1111 Dawson Road
Chapel Hill, NC 27516
919-967-0078
\$3.00 for descriptive
catalog.

Take Root
Roger Boyles
4 Blakes Drive
Pittsboro, NC 27312
919-967-9515
Ferns only.

Other Sources of Propagated Plants

Brookside Wildflowers
Route 3, Box 740
Boone, NC 28607
704-963-5548

Crownsville Nursery
P.O. Box 797
Crownsville, MD 21032
301-923-2212
\$2.00 for catalog,
refundable with purchase.

The Cummins Garden
22 Robertsville Road
Marlboro, NJ 07746
908-536-2591

Forestfarm
990 Tetherow Road
Williams, OR 97544
503-846-6963
\$3.00 for catalog.

Holbrook Farm and
Nursery
Route 2, Box 223B
Fletcher, NC 28732
704-891-7790

Indigo Knoll Perennials
16236 Compromise Court
Mt. Airy, MD 21771
301-442-7656
Free catalog.

Lamtree Farm
Route 1, Box 162
Warrensville, NC 28693
919-385-6144

Missouri Wildflower
Nursery
9814 Pleasant Hill Road
Jefferson City, MO
65109-9805
314-496-3492
\$1.00 for catalog.
Seed source also.

Native Gardens
Route 1, Box 494
Greenback, TN 37742
615-856-3350
\$2.00 for catalog.

Natural Gardens
4804 Shell Lane
Knoxville, TN 37918

Oak Hill Farm
204 Presley Street
Clover, SC 29710
803-222-4245
Native azaleas.

Prairie Moon Nursery
Route 3, Box 163
Winona, MN 55987
507-452-5231/452-1362
\$1.00 for catalog.
Seed source also

Prairie Nursery
P.O. Box 306
Westfield, WI 53964
608-296-3679
\$3.00 for catalog.
Seed source also.

Sunlight Gardens, Inc.
Route 1, Box 600A
Andersonville, TN 37705
615-494-8237

Transplant Nursery
Parkertown Road
Lavonia, GA 30553
404-356-8947
Native azaleas.

We-Du Nurseries
Route 5, Box 72
Marion, NC 28752
704-738-8300

Woodlanders, Inc.
1128 Colleton Avenue
Aiken, SC 29801
803-648-7522
\$1.00 for catalog.
Trees, shrubs, vines, and
perennials.

Prairie Moon Nursery
Route 3, Box 163
Winona, MN 55987
507-452-5231/452-1362
\$1.00 for catalog.
Seed source also

Prairie Nursery
P.O. Box 306
Westfield, WI 53964
608-296-3679
\$3.00 for catalog.
Seed source also.

Sunlight Gardens, Inc.
Route 1, Box 600A
Andersonville, TN 37705
615-494-8237

Transplant Nursery
Parkertown Road
Lavonia, GA 30553
404-356-8947
Native azaleas.

We-Du Nurseries
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Woodlanders, Inc.
1128 Colleton Avenue
Aiken, SC 29801
803-648-7522
\$1.00 for catalog.
Trees, shrubs, vines, and
perennials.



Seed Sources

(Please check previous listing for additional seed sources.)

Burpee

W. Atlee Burpee & Co.
300 Park Avenue
Warminster, PA 18991
1-800-327-3049

Green Horizons

218 Quinlan No. 571
Kerrville, TX 78028
512-257-5141

Midwest Wildflowers

Box 64
Rockton, IL 61072
\$.50 for catalog.

Northplan/Mountain Seed

P.O. Box 9107
Moscow, ID 83843-1607
208-882-8040

Stock Seed Farm, Inc.

RR1, Box 112
Murdock, NE 68407
1-800-759-1520 OR
402-867-3771

Theodore Payne Foundation

for Wildflowers and Native
Plants, Inc.
10459 PTuxford Street
Sun Valley, CA 91352
818-768-1802

Wildseed Incorporated

1101 Campo Rosa Road
P.O. Box 308
Eagle Lake, TX 99434
409-234-7353 OR
1-800-848-0078

Fern Sources**Fancy Fronds**

1911 4th Avenue West
Seattle, WA 98119
206-284-5332
\$1.00 for catalog, refundable with order.

Foliage Gardens

2003 128th Avenue SE
Bellevue, WA 98005
206-747-2998

Henry's Plant Farm, Inc.

4522 132nd Street SE
Snohomish, WA 98290
206-337-8120
Wholesale only.

Sunlight Gardens, Inc.

Route 1, Box 600A
Andersonville, TN 37705
615-494-8237

Take Root

4 Blakes Drive
Pittsboro, NC 27312
919-967-9515

HERBS**Local Nurseries****Boothe Hill Tea Co. and Greenhouse**

Nancy Easterling
23B Boothe Hill
Chapel Hill, NC 27514
919-967-4091
Wholesale only

Crosspointe Farm (plants)

Sheila and Gene Goss
3605 I-85 North
Durham, NC 27704
919-682-1384

Hanton Gardens (plants)

Jack and Wilma Hanton
Carrboro Farmer's Market
Saturdays 7:30 am-1:00 pm

Humphries Nursery

Kathy Humphries
4712 Whitfield Rd.
Durham, NC 27707
919-489-5502
Wholesale and retail, no mail order

Montrose Nursery

Nancy Goodwin
P.O. Box 957
Hillsborough, NC 27278
919-732-7787
\$1.00 for catalog

Niche Gardens

Bruce and Kim Hawks
1111 Dawson Road
Chapel Hill, NC 27516
919-967-0078
\$3.00 for descriptive catalog

Rasland Farm (plants)

Dick and Sylvia Tippet
NC 82 at US 13
Godwin, NC 28344
919-567-2705

Richland Creek Nursery (plants)

Joe and Jeanie Britt
Rt. 1, Box 342-A
Seagrove, NC 27341
919-879-2545

Wenger's Nursery (plants)

John Foushee
3507 Hawkins Ave.
Sanford, NC 27330
919-776-6597

Mail Order**Abundant Life Seed**

Foundation (seeds)
P.O. Box 772
Port Townsend, WA 98368
206-385-5660
206-385-7192 (orders)

Companion Plants (plants & seeds)

7247 N. Coolville Ridge Rd.
Athens, OH 45701
614-592-4643
\$2.00 for catalog

Nichols Herbs and Rare Seeds (plants & seeds)

1190 North Pacific Hwy.
Albany, OR 97321
503-928-9280

Park Seed Co. (seeds)

Greenwood, SC 29646
800-845-3366

Richters (plants & seeds)

Goodwood Ontario
Canada LOC 1A0
416-640-6677
\$2.50 for catalog

Sandy Mush Herb Nursery (plants and seeds)

Rt. 2 Surret Cove Rd.
Leicester, NC 28748
704-683-2014
\$4.00 for handbook/catalog

Taylor's Herb Gardens, Inc.
(plants)
1535 Lone Oak Rd.
Vista, CA 92083
619-727-3485

We-Du Nurseries
Rt. 5, Box 724
Marion, NC 28752
701-738-8300
\$1.00 for catalog

Well-Sweep Herb Gardens,
Inc. (plants & seeds)
317 Mt. Bethel Rd.
Port Murray, NJ 07865
201-852-5390
\$2.00 for catalog

World Seed Co. (seeds)
J.L. Hudson Seedsman
Box 1058
Redwood City, CA 94064

Herb Books

Grieve, Mrs. M. *A Modern Herbal*. New York, New York, Dover Publications 1971.

Hoffman, David. *The Holistic Herbal*. Longmead, Shaftesbury, Dorset, Element Books Ltd., 1988.

Hylton, William H. & Claire Kowalchik. *Rodale's Illustrated Encyclopedia of Herbs*. Emmaus, Pennsylvania, Rodale Press. 1987.

Lust, John. *The Herb Book*. New York, New York, Bantam Books, Inc., 1974.

Reader's Digest. *Magic and Medicine of Plants*. Pleasantville, New York, Reader's Digest Association, Inc., 1986.

Selected wildflowers and herbs are also available at the Carrboro Farmer's Market located next to the rescue squad building in Carrboro, NC. Open Saturday mornings early spring through late fall.

This list is by no means complete, and we are always looking for additions. If you have knowledge of any nurseries that propagate native plants, sell herb plants and/or seeds, or know of additional seed sources, please send name, address, and a copy of the catalog, if available, as well as any comments of direct experience, to:

North Carolina Botanical Garden
CB # 3375 Totten Center
University of North Carolina
Chapel Hill, NC 27599-3375
919-962-0522



Magnolia

N.C. WILD FLOWER PRESERVATION SOCIETY BOARD MEETING — 8 AUGUST 1991

The meeting was held at the Cozart's home in Wilson after a potluck lunch.

President Benson Kirkman led a discussion of the fall 1991 meeting plans for October 20-21 at Chimney Rock Park and Bat Cave. Tentative plans were made for the spring 1992 meeting to be held in Greensboro to honor Lionel and Lucy Melvin and to include Walter and Viola Braxton as our guests.

The Treasurer, Gretchen Cozart, reported a balance on hand of \$2,856.17 in the General Fund and a balance of \$9,118.50 in the Shinn Fund. Susan Wiser, a graduate student at UNC-CH, has been awarded a grant of \$500.

President Kirkman led a discussion of our financial status, including obligations and potential allocations:

1. A decision was made to send out fall meeting notices by first class mail to expedite delivery and to get a check on the accuracy of our mailing list.

2. Possible allocation of funds for purchase of herbarium sheets and folders for Raven Rock State Park. Motion by Noggle, seconded by Linda Lamm, that the Society purchase the items when finances allow. The timing was left to Cozart and Kirkman.

3. President Kirkman requested that \$50 be set aside to purchase a display board with Society name and logo for use at meetings, festivals, and at the annual Cullowhee conference. The Board approved.

4. President Kirkman reported on his trip to the annual meeting of the Eastern Native Plant Alliance in Ohio. The Society paid his \$50 registration fee and voted to award him \$100 toward additional expenses. Motion by Nancy Julian. Ray Noggle made the point in the discussion that the Society had never formally committed to ENPA, although former president Ken Moore was one of the "founders" and President Kirkman is now ENPA Treasurer. President Kirkman reported that he had operated on a consensus of the Board and the membership, keeping them informed of ENPA's activities. He also reported that the Society had been asked to co-host the 1991 meeting with the Botanical Garden. There should be no major expense for the Society, since we were not being asked to underwrite any of the cost. The Board supported Kirkman in this activity and his cooperative effort with the Botanical Garden.

5. Because of rising costs and an uncertain budget, Kirkman and Cozart suggested deferring any major gifts or disbursements until the spring. The Board concurred.

Committees

1. Membership Committee. Success at the Cullowhee conference was cited.

2. Program/Outings. There is an interest in reinstituting local outings. Some of this has been done in the Research Triangle by working with the Triangle Land Conservancy and the Botanical Garden for activities at the Martin Marietta Quarry and Margaret Reid's garden. Volunteer information sheets indicate an interest in other areas.

3. Newsletter. Jean Stewart still needs to be relieved of her duties. She is willing to help, but cannot continue to be "the responsible party" indefinitely.

4. Publications/Publicity. Ray Noggle reported that we are down to about 50

copies of the *Propagation Handbook*, and that it continues to sell well. Benson Kirkman, Ray Noggle, Jane Welshmer, and Julie Moore have agreed to work on updating and reprinting; Jane is writing a new chapter on ferns; Jim Ballington (NCSU Horticulture/Plant Propagation) has agreed to review the handbook with Benson Kirkman. Noggle reported that we have about \$4600 in the account.

Adrianna G. Kirkman
Acting Recording Secretary

N.C. WILD FLOWER PRESERVATION SOCIETY BOARD MEETING — 24 FEBRUARY 1991

The meeting was held at the Welshmers' home in Chapel Hill after a twelve o'clock potluck lunch.

The Treasurer, Gretchen Cozart, reported a balance on hand of \$1591.30 and a balance in the Shinn Fund of \$9694.99.

President Benson Kirkman stated that more money is needed than dues and contributions currently provide, and an increase in dues was considered. The Board concluded that a budget of expected expenses and income should be drawn up. Large expenses in prospect are the revision of the *Plant Propagation Handbook* and the republication of Dr. B.W. Wells' *Natural Gardens of North Carolina*.

It is planned to have an introductory chapter to precede the original text, which will include an account of Dr. Wells' life and work, and addenda following each chapter of the original text to supply pertinent recent information.

Ray Noggle reported a balance of \$5000.00 in the *Handbook* fund. It was suggested that some of the Botanical Garden volunteers be asked to work on the revision.

After discussion of possibly raising the dues, it was voted that \$250.00 be transferred from the Shinn Fund to the General Fund to cover current expenses and to return that amount to the Shinn Fund when dues have been paid.

It was voted to adopt an interim policy (until the membership can vote on an allocation) to apply 20% of Lifetime (\$25.00) Membership dues to the General Fund and 80% to the Shinn Fund.

A new plan for mailing the Newsletter (already described to Assistant Director Ken Moore at the Botanical Garden and strongly approved by him) is to enlist the help of Garden volunteers and for the Society in return to make a contribution to the Garden. The President will explore this further.

The spring general meeting, Saturday and Sunday, May 4 and 5, 1992, will be at Greensboro and will honor Mr. Lionel Melvin for his many years of work in the Society. Nell Lewis has agreed to bring him and Mrs. Melvin to the meeting. The Braxtons, who have also given much service, will be invited and will be recognized.

Nancy Stronach suggested that we write to the Landscaping Division of the Department of Transportation and recommend planting the longleaf pines along Interstate 95.

An Arbor Fest will be held from 12 noon to 4:00 p.m. March 23 at the NCSU Arboretum under the sponsorship of this society, the Triangle Land Conservancy, and the North Carolina Botanical Garden.

Ruth Noggle,
Secretary *pro tem*

WELCOME NEW MEMBERS

Beasley, Blair R.
P.O. Box 38
Colerain, NC 27924

Christian, Dr. & Mrs. B.J.
216 Mistletoe Dr.
Greensboro, NC 27403

Clark, Mrs. W.G. III
P.O. Box 1138
Tarboro, NC 27886

Georgion, Tony
210 Honeysuckle Dr.
Rutherfordton, NC 28139-3232

Greene, Mr. & Mrs. Peter S.
701 Plummer Dr.
Greensboro, NC 27410

Hiles, Dorothy
160 Dowdle Mt. Rd.
Franklin, NC 28734

Hubbard, Brenda C.
Rt. 10, Box 356
Hickory Tree Rd.
Winston-Salem, NC 27127

Kline, Marge & George
1289 Old Georgia Rd.
Franklin, NC 28734

Lambert, Ms. Aline
341 Devane St.
Fayetteville, NC 28305

MacIntyre, Margo & George Morris
233 S. Academy St.
Mooresville, NC 28115

Sally & Chris MacMillan
Big Buck Island
Rt. 1, Box 8MC
Buffton, SC 29910

Thurstone, Jacquie
White Oak Farm
Rt. 4, Box 980
Burnsville, NC 28714

Wadopian, Ms. Curry
100 Windswept Lane
Asheville, NC 28801

Yarborough, Ray, Jr.
2913 Skye Dr.
Fayetteville, NC 28303

Zucchini, Mr. & Mrs. Vincent
Rt. 3, Box 155A
Carthage, NC 28327

A letter from Jeffery Beem, Library Technical Assistant of the Couch Biology Library, Botany Section, UNC, Chapel Hill, welcomes the Spring, 1989 issue of our *Newsletter* which we recently replaced for them for the useful articles on toxic plants by Villa Zala and Linda Stier. He wishes to add to Stier's list this information: "*Campsis Radicans*, trumpet creeper, causes a severe contact dermatitis in some people. As I was growing up in North Carolina, that danger was common knowledge, as revealed by the common name cow-itch, which until lately was the only common name I knew it by other than trumpet vine."

NORTH CAROLINA WILD FLOWER PRESERVATION SOCIETY, INC.

Aims & Objectives

The North Carolina Wild Flower Preservation Society was formed in 1951 by a group of individuals appreciative of native plants throughout the state and region. The purpose of the Society is to promote enjoyment and conservation of native plants and their habitats through education, protection, and propagation.

Spring and fall meetings are held at "natural gardens" across the state. Members exchange seeds and propagated plants at these meetings. Other excursions are organized on a local basis throughout the year.

The Society Newsletter is issued twice a year with articles and illustrations by professional and amateur contributors.

The Society publishes the "N.C. Native Plant Propagation Handbook" that is available for sale at the Botanical Garden or by mail (\$5.00 postpaid).

The Society Scholarship/Grant Fund sponsors research on native plants by undergraduate and graduate students. The fund is supported by member contributions and by gifts and memorials. Applications are made to the Scholarship/Grant Fund Committee for awards in May of each year.

The Society is a nonprofit organization under North Carolina and Internal Revenue Service regulations. Donations are tax deductible.

Correspondence concerning the Society and its programs should be addressed to: North Carolina Wild Flower Preservation Society, Inc., c/o North Carolina Botanical Garden, Totten Center 3375, UNC-CH, Chapel Hill, NC 27599-3375.

MEMBERSHIP APPLICATION

Individual Annual Dues: \$ 7.50
Family Annual Dues: 10.00
Sustaining Annual Dues: 25.00
Lifetime Membership: \$150.00

Scholarship Fund Donation: _____

Name _____

Address _____

City _____

State _____ Zip _____

☐ New ☐ Renewal

*Please send this and all address
corrections to;
North Carolina Wild Flower
Preservation Society, Inc.
Mrs. S.M. Cozart, Treasurer
900 West Nash Street
Wilson, NC 27893*

If you know your added four digit zip number, please include it in your address with your dues payment. It will soon be mandatory.



North Carolina Wild Flower Preservation Society, Inc.
Totten Garden Center 3375, UNC
North Carolina Botanical Garden
Chapel Hill, North Carolina 27599-3375

Mr. & Mrs. Helmuth G. Kleizien
1804 Colonial Ave.
Greensboro, NC 27408

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