



Native Plant News

The Newsletter of the North Carolina Wild Flower Preservation Society

Volume II, Issue 4

September 2004

NCWFPS Fall Trip October 9 – 10 Sandhills Area

Saturday, Oct 9

8:30 am – meet at Hampton Inn in
Aberdeen
9:00 - 12:00 – **Quewhiffle Preserve**
12:00 – 1:00 – Lunch at a local restaurant
1:00 – 4:30 – **Pinebluff Lake Natural
Area (Delano Park)**
5:00 – 7:00 – Dinner
7:00 – 8:30 – Presentations &
Discussion at Hampton Inn
Meeting Room

Sunday, Oct 10:

8:30 am – meet at Hampton Inn in
Aberdeen
9:00 – 12:00 **Weymouth Woods**

Field Trip & Discussion Descriptions

Quewhiffle Preserve, Saturday 8:30 am – Harry LeGrand (NC Natural Heritage Program Zoologist) and Mike Norris (The Nature Conservancy Land Steward/Fire Ecologist) will lead a tour of this 242-acre preserve owned by the Nature Conservancy. Rare and interesting species at the site include spring-flowering goldenrod (*Solidago verna*), twisted-leaf goldenrod (*S. tortifolia*), white wicky (*Kalmia cuneata*), Bachman's sparrow, and four rare butterflies. Most of the site is planted in longleaf pine, but it has native groundcover. Plant communities include a mesic flat and streamhead pocosin near Quewhiffle Creek. As much of the site was burned last spring, expect a good showing of composites in bloom. Bring along your binoculars for bird and butterfly viewing!

Pinebluff Lake Natural Area (Delano Park), Saturday afternoon – Harry LeGrand will lead the tour. Several natural communities are packed into this 45-acre park owned by the town of Pinebluff. The site consists of uplands and wetlands surrounding a man-made reservoir. Communities include Pine/Scrub Oak Sandhill, Streamhead Atlantic White Cedar Forest, Streamhead Pocosin, and boggy lakeshore. Expect to see pinebarren gentian (possibly blooming!), several rare graminoid

species, and a diversity of herbaceous plants, including all three species of pitcher-plants known to occur in Moore County. A dense population of seedbox (*Ludwigia pilosa*), growing along the shoreline is the most inland one known in NC (this species is seldom found in the sandhills). One pocosin contains an abundance of honey-cup (*Zenobia pulverulenta*) and smooth winterberry (*Ilex laevigata*), shrubs typical of pocosins but not common in the county. The eastward-flowing creek that empties into the lake contains numerous Atlantic white cedars (*Chamaecyparis thyoides*). Surrounding the shoreline are typical sandhills upland vegetation types, with longleaf pine and various scrub oaks.

Presentations & Discussions, Saturday evening, 7:00-8:30 pm:

***Rhus michauxii* rescue project.** Kevin Lapp (Sandhills Area Land Trust) and Mike Norris (The Nature Conservancy Sandhills Office) will discuss a collaborative project to transplant a population of Federally Endangered Michaux's Sumac.

Red-Cockaded Woodpecker Habitat Preservation and the Safe Harbor Program. Susan Miller (US Fish & Wildlife Service Sandhills Regional Office)

Weymouth Woods State Park- Sunday 8:30 am

Scott Hartley (NC Div. of Parks & Recreation) will lead a ~2.5 mile tour through natural areas at the state park.

What to bring: water, snacks, sunscreen/hat, sturdy walking shoes, enthusiasm! We will stop for lunch at local restaurants on Saturday and Sunday.

Registration form enclosed!

Native Plant News

The Newsletter of the North Carolina
Wildflower Preservation Society.

You Can Contribute:

Articles
Photographs
Letters to the Editor
Suggestions and comments

You Can Join the Newsletter Committee

Contact:

Editor: Katherine Schlosser
1402 Bearhollow Rd.
Greensboro, NC 27410

Deadline for next issue: Jan. 15,
2005

kathyschlosser@aol.com

From the President The Importance of Community

As days dance on, I realize more and more the importance of community. Whether we look at native plant communities, the town we live in, our faith community, our global village, or any of the other communities of which we are part, the important thing is that we are connected together.

My taking care of Mom in New Jersey for three months this summer as she healed from her brown recluse bite has really brought this message home to me.

In 1968 when I got married I left my close-knit extended family in New Jersey to begin my new life in North Carolina. Within two years I made the decision not to have children because I realized how important it was to have family nearby to help raise them. From my childhood I knew how much it meant to have my grandparents, aunts, uncles, and cousins within walking distance. As a child I remember vividly helping to care for my Babci (Grandmother). She beamed as I read the Polish newspaper to her; laughed with delight as I combed her hair. I still can see my tiny seven-year old hand wrapped around hers as we practiced writing the English version of Wladislawa, "Lottie", so she did not have to write "X" again. I had first hand experience in Hillary Clinton's message: "It takes a village to raise a child."

From the work we do as advocates with the North Carolina Plant Conservation Program and the study we do in our walks and programs, it is very clear how important it is to work to protect not only the specific native plant but also its community. Even if the last 20 plants on Earth exist only in a tiny 10-foot by 10-foot plot, it is critical to protect and manage many surrounding acres and buffer so the surviving species will once again flourish. Not only must we as humans buy the land, but we must also extend that species' community to include the ongoing care, concern, and protection by humans to insure its chances of survival.

This summer has shown me what a wonderful community we have in our native plant enthusiasts. We care not only for native plants but also for the caring peo-

ple. In so many ways we are the family that understands our profound connection to the Earth.

I cannot tell you in words and thank you enough for the love you have extended to me.

Though I missed the picnic and other summer native plant activities in North Carolina, your continued phone calls and notes, your doing what needs doing, your words of concern and connection, mean so much to me. You are such a wonderful caring surround.

You care so deeply for Earth and all its glorious Creations, including each one of us.

Thank you.

With much love,
Alice Zawadzki

An Important Message from your board of directors

For several years a debate has been conducted among members of the Society and the board of directors concerning the advisability of updating the name of our organization.

First proposed about ten years ago by a member of the organization, the proposal was taken to the board. After much discussion, the proposal was tabled, only to periodically re-surface.

A year ago or so, all members of the Society were invited, through the newsletter, to call, mail, or email their thoughts about changing the name. Based on those responses, the board again conducted lengthy debates, considering all comments and all possible ramifications. Both sides of the issue were well represented.

At the last meeting of the board of directors, a unanimous vote taken to change the name of our Society to:

North Carolina Native Plant Society, Inc.

To maintain continuity, and out of respect for the original name of our organization, the board proposes that the name, North Carolina Wild Flower Preservation Society, Inc., be retained, at least temporarily, as the legal name of the organization.

Now it is your turn....At the October 9th meeting of the Society, members present will be asked to ratify the decision of the board.

Please make plans to attend and support your organization as we continue to address the needs of the Society.

2004 Board of Directors

Welcome New Members!

A special welcome to all of our new members. We look forward to meeting you and to having you join us for state wide events.

We also encourage you to take advantage of your local chapter activities.

An appreciative "Thanks" to all of you who have sent in your renewals for this year. We also greatly appreciate the Life members who sent donations and/or have sponsored a friend with a gift membership.

If you have not renewed your membership yet--we are looking for "the check in the mail !!!"

Thanks to all,
Marlene Kinney
Corresponding Secretary

New members since the last Newsletter:

Ken Quilty & Dena Shenk
Karen Roth-Batten
Trena Mc Nabb
Earl & Lynda Creutzberg
Bill Colvin
Ann Rimmer
Elsa Liner
Ted Scheick
Carlotta Santana
Bill Switzer
Bob Caviness
Mary Morrison
Lacy Dick
Ron Williams
Scott & Lysa Hartley
Lee Landis

*Don't forget **your** North Carolina Wild Flower Preservation Society when making end of year charitable contributions.*

As a 501(c)(3) organization, your contributions are tax deductible.

Donations may be designated for scholarships, research, or general operating expenses. Make your checks payable to NCWFPS, with 'donation' on the memo line.

Mail to: Tom Harville, Treasurer, 104 Birklands Dr., Cary, NC 27511

Calendar

Sept. 5	Triangle Chapter Email Marlene Kinney for details mkinney3@nc.rr.com
Sept. 13	Triad Chapter 6:00 – 7:30 Tree ID Walk, Bog Garden, Greensboro Details: kathyschlosser@aol.com
Sept. 18	Triangle Chapter Email Marlene Kinney for details mkinney3@nc.rr.com
Sept. 18	Piedmont Chapter 1:00PM – 4:30PM Keying out flowers using <i>Newcomb's</i> Details: jean14424@aol.com
Oct. 3	Piedmont Chapter 1:30 – 4:30 In search of <i>Helianthus schweinitzii</i> . Email Jean for details jean14424@aol.com
Oct. 4	Triad Chapter 6:00 – 7:30 Ferns Call 336-855-8022 for details Or email kathyschlosser@aol.com
October 9-10	NCWFPS Fall Trip Sandhills / Gamelands area Information and registration form in newsletter
Oct. 17	Triangle Chapter Email Marlene Kinney for details mkinney3@mc.rr.com
Nov. 1	Triad Chapter Tree ID from bark and twigs Piedmont Environmental Center, High Point 6:00 – 7:30 kathyschlosser@aol.com
Nov. 7	Triangle Chapter Email Marlene Kinney for details mkinney3@mc.rr.com
Nov. 14	NCWFPS Board Meeting
Nov. 21	Triangle Chapter Email Marlene Kinney for details mkinney3@mc.rr.com



Japanese Stilt Grass
Microstegium vimineum

Ted Bodner
<http://www.nps.gov/plants/alien/pubs/midatlantic/mivi.htm>

establishes on damaged sites where practices are such that the ecosystem cannot function properly. These sites will quickly cover with stilt grass because the soil will no longer support native grasses or herbs.

Many plants, such as ginseng, have specific requirements for habitat. You cannot expect them to continue when their environment has been removed any more than you can expect to grow chickens under water. Plants are often linked to certain species of trees, and have symbiotic relationships with everything else in their environment. When this system is broken, many plants will die out.

We live in a non-brittle environment in WV. This means that rest is the most powerful tool for curing the problem of habitat destruction. However, in a non-brittle environment all space when rested will eventually



©Thomas G. Barnes, Barnes, T.G. & S.W. Francis, 2004. *Wildflowers and*

cover with what can tolerate the degraded conditions left in the wake of disturbance. This is community dynamics in action.

I was talking with a landscaper a few days ago and mentioned a lot of hoopah about stilt grass. He said that when he moved into his house ten years ago his yard was made up of stilt grass. He simply mulched the area with horse manure compost (a free material in this area) and has not seen it since.

Anything which alters the soil conditions both above ground and below will alter the entire ecosystem for the area in question. A forester in WV who has been outspoken about stilt grass “invading” his property is a good example to examine. Over the years various decisions have been made, from a non-holistic perspective, which have lead up to the invasion. Large trees were removed periodically for income, others to allow more favored trees to grow. Just removing these trees has a profound impact on the system both in the soil and the light, which ultimately impacts community dynamics.

This is not to say that removing the trees should not have happened, but that he does not account for unforeseen consequences and is left upset because stilt grass has appeared. This is understandable for someone coming from a linear background. When you have a problem shifting gears in your SUV, you take it to a mechanic and get parts replaced. The problem is that nature functions in wholes and this does not apply with a forest.

Nature is responding as best as it can by getting the soil covered as quickly as possible. Stilt grass is one specie which has been able to establish, avoiding problems of erosion, which adds to the recovery time for the forest. If what you want is something other than stilt grass, the habitat must be recovered. This is very simple really.

Several options are available to achieve balance:

The first option is to leave it alone. It might take ten years for disturbed areas to recover without any influence, but they will recover and the stilt grass will go away when it is no longer needed.

A second option would be to incorporate organic material containing animal manure as mulch right onto the stilt grass so that the losses from disturbances are quickly replaced.

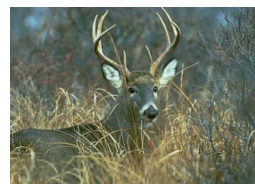
A third option, which mimics what nature used to do before the removal of large numbers of animals, would be to use animal impact on these areas. Concentrating animals on the stilt grass for short periods of time to get the microbial cycling going again, while adding organic material to the area works, because this is what I am doing.

How will the stilt grass be replaced? Grass-

es will normally seed in and establish. If you want forest plants the grasses will gradually fade away as the soil builds and the tree canopy expands. If you don't have any trees, you are stuck with grasses and broadleaf field plants.

Some mention of national park areas having stilt grass has been brought up as if to say “here is an example of a place in pristine condition” with stilt grass. This is false for a number of reasons. These areas tend to be fairly sterile due to over rest. It is not natural to have these areas left untouched by animals. The forest was periodically occupied by large herds of animals moving through and putting back living organisms through urinating, putting down a layer of manure, and trampling as they go. What we have now is an over population of deer which have created a system of permanent partial rest that results in favored species being diminished while other plants are left to proliferate. The impact of the deer from a microbial standpoint remains so low that soils become more sterile and lifeless. This is the primary response of an impaired wildlife strategy.

It is easy for people who want to continue with damaging practices to blame a weed for their problems. While I am not proposing that anyone is guilty of a crime or that they



should be required to stop what they are doing, I am proposing that the cause of such problems is really far simpler to understand.

It is now vogue to look at weeds as invading species. From my observations, the idea of native and non-native is not the issue and the language presents a problem. So, let's talk about weeds. Weeds are plants that we don't want crowding what we do want, and often tolerate more extreme conditions than other plants.

There are four key insights when considering these issues:

1. One needs to take a holistic approach because nature functions in wholes not parts. Managing otherwise results in consequences not intended.

2. Environments may be classified on a continuum from non brittle to very brittle according to how well humidity is distributed throughout the year and how quickly dead vegetation breaks down. At either end

of the scale, environments respond differently to the same influences. Resting land restores it in non-brittle environments, but damages it in very brittle environments.

3. In brittle environments, relatively high numbers of large, herding animals, concentrated and moving as they naturally do in the presence of pack hunting predators, are vital to maintaining the health of the lands we thought they destroyed.

4. In any environment, overgrazing and damage from trampling bear little relationship to the number of animals, but rather to the amount of time plants and animals are exposed to the animals.

There are six tools that can be applied to ecosystem processes. Technology, rest, fire, grazing, animal impact or living organisms as applied with human creativity, money and labor is all you have to work with. All of these tools are equal. How you use them is where one must be careful.

Here is a specific list of questions to ask when addressing a natural resource problem.

1. Which ecosystem process is the most appropriate to focus on to help you reason out what is happening? If the problem involves an increase or decrease in a particular organism, for example, look to community dynamics; if it involves a gain or loss of water (e.g. a falling water table) look to water cycle, and so on. How would you describe the ecosystem process under consideration in relation to how it potentially could be?

2. Has any natural disaster occurred that could have contributed to the problem?

3. How brittle is the environment?

4. Which tools have been applied generally for a prolonged period of time, and how?

5. How does each tool applied tend to affect the ecosystem process under consideration at that level on the brittleness scale?

6. Based on the answers, what is the probable cause of the problem?

7. What can be done to remedy the problem? Is this something you can test on a small-scale area to confirm that the diagnosis is correct? Does your proposed remedy address the weakest point in the life cycle if you are dealing with a problem organism?

8. What criteria could you monitor to ensure that your diagnosis and the proposed remedy is on target?

Weeds are actually serving a purpose. They are keeping the soil covered and preventing erosion. If what you want is other plants, what are the conditions needed for those plants to grow well? Remember the weakest point in the life cycle question and turn it around. It is also worth noting that change in ecosystems is normal and should be expected.

The key to what I am pointing out is that the land manager must diagnose each problem in each area. I don't know of anything that would apply everywhere. I am merely providing some examples of how this process works.

Fred Hays

Editor's Note: *Fred Hays is a member of the Plant Conservation Alliance-Medicinal Plants Working Group. The Group, of which NCWFPS is also a member, has a Listserve on which members periodically engage in discussions of related topics. Japanese Stilt Grass has been the subject of much debate over the few months. Mr. Hays agreed to allow an edited version of his last article to be printed here.*



Monarda fistulosa.

Found most commonly in the mountain counties of North Carolina, this *Monarda* can also be found in several piedmont and two coastal plain counties. It blooms from July – September, has soft lilac flowers and slightly grayish leaves, often growing in meadows, along roadsides, and at wood margins.

It's flashier sister, *Monarda didyma*, has scarlet flowers and is the plant from which a tea was made, giving rise to the common name Oswego Tea. The story goes that *Monarda didyma* was an ingredient of Liberty Tea in Revolutionary War days.



K. Schlosser

Northern hardwood cove forest – Nantahala N. F.

Fred Hays thesis is a bit unconventional, but at least he is trying to see the problem of stilt grass from an ecosystem perspective. Personally, I think that he is overemphasizing the role of browsing animals, which is ironic because most people ignore them.

There have been profound changes in the composition of North American large herbivores and carnivores (which prey on the herbivores) over time, no matter which time scale you examine, and most of these changes (since the last glacial maximum 18000 YBP) involved humans as a significant causal agent or at least vector. From the Paleo-Indian mass extinctions 11500 YBP, to the Archaic and Woodland nomadic agricultural practices involving burning, to the European gradual mass extinction of the aboriginal peoples and practices and the last large herbivores themselves (bison and elk), we humans have been directly modifying the ecosystem we inhabit to meet our needs for millennia.

So, if you are trying to restore an ecosystem, how far back do you go for your target? How much human control do you remove? The trouble is that if

you go back before humans arrived in NA, NA looked little like it did today because we were in a glacial maximum and we had Arcto-Tertiary forest growing on our present coastal plains!

The truth is that the post-glacial ecosystems evolved under human influence, even if it was less omnipresent than today or it has been in Europe for the last 5 millennia. Things get even more complicated when you try to define a native plant in the context of an ecosystem. Chestnuts, now functionally extinct, did not appear in New England until about 3000 YBP. So were they native? Ginkgoes, rediscovered in remote China, have been found as fossils in rocks tens of millions of year old in Wyoming and British Columbia. So aren't Ginkgoes NA natives? Likewise dawn redwoods and many others.

Maybe the issue is one of rate of disturbance and equilibrium, but even that is quickly mired in scale. As the idea of a climax forest has faded into one of stasis between periodic disturbances (gap forests, pit and mound topography, etc.), is man-induced plant species migration even abnormal? I surely don't know, but I think that Fred Hays is trying to grapple with this concept in his way of thinking.

As an aside, it is worth noting that sustainability is defined differently for agronomists and especially foresters than it is by others in the environmental "sustainability" movement per se. Sustainability for us means providing for our needs today without compromising our ability to provide for our needs tomorrow, as defined by the Brundtland Commission in 1992. So this is what most people mean when they think of sustainability, even if they cannot articulate it. But to the forest products and agricultural industry, sustainability simply means undiminished harvests over time.



Ginkgo biloba

How you achieve these undiminished harvests is not specified, and sustainability in this context often has less to do with working within natural communities than it does manipulating them. For example, a pine plantation that is monoculture *Pinus taeda*, with all other plant species herbicided away, and the trees fertilized routinely with chemical fertilizers so that it can be clear cut and replanted on a 30 year cycle indefinitely without decreased yield in saleable board feet - this is the ultimate sustainable forest. Of course, this is hardly a sustainable ecosystem. And this is why groups such as the Forest Stewardship Council, who monitor true sustainable forest management for all species, including humans, does not certify the millions of acres of NA "sustainably" managed forests under the AFPA's (American Forest and Paper Association) Sustainable Forests Initiative. The SFI forests are managed for sustainable yield, and nothing else matters!

As a land grant college, Cornell is very closely tied to (conventional) agribusiness and the (extractive) forest products industry. This is something to keep in mind as one reviews their programs such as Agroforestry.

Pete Schubert is a NCWFPS member and Plant Rescue Coordinator.

Report from Cullowhee Native Plant Conference 2004

This was my 7th year in a row and it keeps getting better! I really like the way the focus has broadened beyond strictly native plants. I richly enjoy the people, kindred spirits despite widely different backgrounds and perspectives. I find it fascinating that the concept of native plants, which can be perceived as being racist and elitist, is really nothing more than knowing and loving the growing world around you. I see native plant people as gardeners who have evolved into naturalists, going beyond conventional (cultural) wisdom to a deeper appreciation of the fullness of nature and recognizing that there is a vastly complicated "bigger picture". There is something deeply satisfying to me being around others who share these passions and manifest them in such varied ways.

Pete Schubert

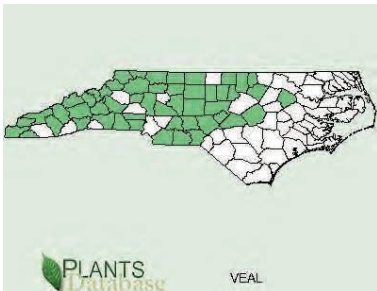


A few of the NCWFPS members attending the Cullowhee Conference. Our scholarship recipient, Sara Martin, is 4th from the left in the front row. Thanks to Tom Harville for the photo.

Another plant to watch for in late summer and fall....



Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database / USDA SCS. 1989. *Midwest wetland flora: Field office illustrated guide to plant species*. Midwest National Technical Center, Lincoln, NE.



Verbesina alternifolia (L.) Britt. ex Kearney

Syn. *Actinomeris alternifolia* Common names: Wingstem, Yellow Ironweed

A perennial that may reach 8 – 12 feet in height with showy yellow flowers and conspicuous 'wings' that run along the length of the stem. Wingstem is considered by some a weed growing in meadows, fencerows, and along roadsides.

The leaves are lanceolate to ovate, approximately 3 to 8 inches long and 1 to 3 inches wide. Leaves are glabrous (without hairs), tapering to the apex and with a serrated margin. Leaves are arranged alternately along the stem.

Flowers occur in clusters at the ends of the erect stems. Each flower consists of outer ray flowers and inner disc flowers, all of which are bright yellow in color. Ray flowers are approximately 3/4 to 1 1/4 inches long, 3 to 6 mm wide.

Found in most counties west of the coastal plain fall line.



Gentianopsis crinita (Froel.) Ma

Robert H. Mohlenbrock. USDA SCS. 1989. *Midwest wetland flora: Field office illustrated guide to plant species*. Midwest National Technical Center, Lincoln, NE. Courtesy of USDA NRCS Wetland Science Institute. Usage Guidelines.

One of the rarest plant species in North Carolina is the lovely fringed gentian (*Gentianopsis crinita*). This gorgeous plant is listed as Endangered and of Special Concern by the state of North Carolina, but despite recent studies of habitat and range, very little is known about the life history of the species. This plant is so beloved by those who have worked with it that when part of a population in NC was recently threatened by a road-paving project, volunteers jumped at the chance to rescue the imperiled plants. This opportunity to work with the species gave me a chance to review what is currently known about fringed gentian and look ahead to questions that still need answers.

Fringed gentian is reported to be a biennial by some researchers and an annual by others. However, all who work with the species agree on the beauty of the striking deep purple or blue flowers. The 4 corolla lobes have finely fringed margins. Before opening, the flowers are wrapped and twisted into a showy bud, and upon opening, the petals spread almost horizontally. Plants bloom in Sep-

tember and early October.

The species grows in open habitat where the predominant vegetation consists of tall herbs and low woody shrubs. It does not appear to compete well and does not survive among tall shrubs. Preliminary studies in New York indicated the species lacks a persistent seed bank, so preserving live individuals in populations is especially important. According to studies conducted by Jane Robertson at Cornell University and Kay Campany at Appalachian State University, throughout its range, the species appears to be restricted to circumneutral soils, in sites with reduced competition from other plants. This combination of site conditions is rare in North Carolina, so it is no wonder the species is rare here.

According to Robertson's research, fringed gentian would have been ideally suited to conditions that were probably widespread in the late-glacial period in eastern North America. After ice retreated in New England approximately 18,000 years ago and before forest cover developed around 12,000 years ago, vegetation was characterized by bryophytes, herbs, and low shrubs. Robertson hypothesizes that substrates would have been very unstable in a zone along the ice margin. Widespread frost heaving in saturated soils would have made unleached mineral substrates that were relatively high in bases, including calcium, relatively common. The flora during the late glacial period in eastern North America appears to have been dominated by light-demanding, herbaceous species that grow on calcareous (circumneutral) substrates, and *Gentianopsis* is known to have been present. The current range of fringed gentian is largely within the part of North America that was once glaciated (except for a narrow band along the Appalachian mountains). In the time since the forests have dominated eastern North America, suitable habitat for fringed gentians appears to be largely restricted to the few areas that have maintained open, calcareous habitat, including unstable river banks, marl marshes, beaver meadows, fragments of prairie, and through human disturbance, old fields, roadsides, and mines.

Fringed gentian is historically known from 26 states from the southern Appalachians to New England and west to North Dakota, but is threatened, endangered, special concern, or extinct in all but 7 of those states. Although it has no federal conservation status, the species is listed endangered by the states of NC, GA, VA, MD, RI, NH, and ND. The three occurrences in NC are in the mountains

(Ashe, Clay, and Watauga counties). Two of the occurrences receive some form of protection from the Nature Conservancy and US Forest Service. The third population occurs along an unprotected roadside. In NC and elsewhere across its range, this species appears to be declining. Fringed gentian in NC is threatened by invasion of habitat by woody shrubs, wetland drainage, and the alterations in natural soil disturbances that would keep substrate open for seed germination.

When biologists from the NC Department of Transportation (NC DOT) recently alerted me to a road project in the vicinity of a fringed gentian population, I got together with Peter Smith (NC Natural Heritage Program), Mike Sanderson and Jay Mays from NC DOT, Gary Walker, Zack Murrell, and Kay Campany from Appalachian State University (ASU), and Lee Echols, a local volunteer, to find a way to rescue the imperiled plants. Though the road-paving project had not yet begun at press time, NC DOT plans to avoid the bulk of the population. In the meantime, we have stitched together a tentative plan to remove any plants in the impact area to a nearby nature preserve, where the rescued plants can be protected and studied. With luck, this road paving project could prove to benefit the species in NC – the transplant and monitoring will move plants away from vulnerable roadside habitat and at the same time give researchers at ASU an opportunity to learn more about the site requirements and life history of the species. Information learned in this endeavor could eventually be used to help manage and protect the other known populations, and keep this species a part of the rich flora of North Carolina.

Misty Franklin
NC Natural Heritage Program

Chapter News

Triad Chapter

The Triad Chapter has been meeting weekly over the summer to learn plant taxonomy and plant identification.

The Chapter has participated in plant rescues at Randleman Dam, Browns Summit, Lawndale Drive, and Hilltop Road sites, thanks to the efforts of **Lynda Waldrep** and Triangle member **Tom Harville**. Many of the plants have been placed in the Wildflower Walk at the Greensboro Arboretum, with help from **Diane Laslie**, **Joanne Lapple**, **Mimi Westervelt**, and **Marion Sledge**.

Schedule:

Sept. 13: Fern Walk in the Bog Garden
Sept. 27: Plant Study
Oct. 4: Tree ID Walk at PEC
Oct. 11: Plant Study
Oct. 25: Plant Study
Nov. 1: TBA
Nov. 8: Plant Study
Nov. 22: Plant Study
Jan. 3: Winter Tree ID
Jan. 10: Plant Study
Jan. 24: Plant Study

Call Kathy 336-855-8022 or email Kathyschlosser@aol.com for details and updates.



Triad member **Mark Rose** studying terminology.

Epigynous or hypogynous – **Claudia von Grunebaum** discovers the answer with knife and magnifying lens.



Triangle Chapter

July and August activities have been mainly scheduled for Plant rescues at the Edwards Mill site.

Several of our group attended the Native Plant Conference at Cullowhee.

Dale Suiter and **Misty Franklin** will be helping us plan exciting local outings for the upcoming season.

Marlene Kinney

First Sunday (Reid Garden group)

Third Sunday (excursions)

Contact Marlene Kinney for details on events.
(mkinney3@nc.rr.com)

Relaxing after a visit to Tom Harville's garden.



Charlotte Chapter

Jean's email list needs updating. She invites any members in the Charlotte area who would like to participate in local events to send her their email address.

Jean's email address is jean14424@aol.com. Put NCWFPS-Charlotte in the a subject line.

There are two activities planned for the Charlotte area Chapter of the NC Wild Flower Preservation Society:

Saturday 9/18 Identifying plants using Newcomb's Wildflower Guide. 1:00 PM - 4:30 PM

The Newcomb's guide has a simple key that we will learn to use. The training will be at my house at 14424 Harbor Estate Road, Charlotte. I am within easy walking distance of the McDowell Park Nature Preserve. If you are interested, email me, and I will send you directions to my house. You will need a copy of Newcomb's book. It is available on the web for \$13.97.
Amazon.com: Newcomb's Wildflower Guide

Sunday 10/3 Wildflower Hike 1:30 PM - 4:30 PM

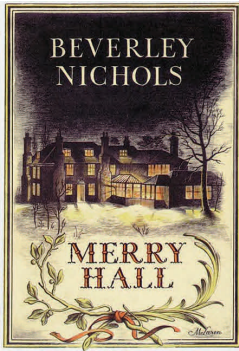
Wildflower walk to see the *Helianthus schweinitzii*, the Federally endangered sunflower that grows only within about 60 radius of Charlotte. We will visit Redlair Farm, which is protected by a conservation easement held by the Catawba Land Conservancy. The farm is a wonderful, botanical haven and we will see many plants on our walk. Email me if you are interested and I will send you directions. This will be a walk through the woods and fields, so you need to be prepared to walk several miles over uneven terrain.

Feel free to bring friends along!



Phacelia, Large Bellwort, and Chickweed spotted on visit to Bat Cave Preserve

Book Reviews



"Some fall in love with women; some fall in love with art; some fall in love with death. I fall in love with gardens, which is much the same as falling in love with all three at once." Yep, that's me—except for the

death part!

"...for it was eminently an occasion for secret prowling and gloating and muttering to one's self, and squinting with one's head on one side, and taking long, deep, ecstatic inhalations." I know this guy! He was talking about enjoying lilies but I have done the

very same thing over other plants. That's what was so intriguing about this book. While Nichols was writing about his new home, Merry Hall, and the gardens that surround it, I have done the same kind of things in my garden—made major alterations, planned out a project with stakes or flags. And I can feel his enjoyment of the rewards of the labor. The difference is that he eloquently describes the events and makes them leap to life in my mind. Even the characters are so real, I know them also!

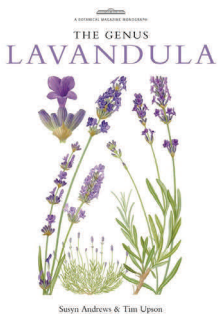
I must confess that I did feel pangs of envy because he had a greenhouse and a kitchen garden and of course, Oldfield. Can you imagine the luxury of a full time gardener? I can do without One and Four but I suppose they could serve a purpose if you have voles and mice.

All in all, I say this is a feel good book—a real story about the love of flowers and gardening. Something we all know and love.

Nichols was a prolific writer but I love him for his gardening/home renovation books: *Merry Hall*, *Laughter on the Stairs* and *Sunlight on the Lawn*.

Tom Harville

Merry Hall, Beverley Nichols (1898-1983). Copyright 1951. Reprinted by Timber Press, 1998.



The Genus

Lavandula

Those interested in a thorough, understandable exploration of a plant genus need look no further than *The Genus Lavandula* by Tim Upson and Susyn Andrews. Written for one of our beloved garden plants, which happens also to have a history of medicinal and culinary purposes as well as being a contemporary economic crop, the book is an essential guide for those with more than a passing interest in lavender.

Though neither native to North America nor naturalized, lavender is a popular plant and indicates the extent of the influence of man on the movement of plant species across the globe. Upson and Andrews detail the importance of monasteries in the spread and preservation of medicinal plants, citing research into the content of adobe

bricks from the Baja California area. Pieces of lavender plants were found, suggesting that Franciscan monks, accompanied by Spanish soldiers, brought the plants with them to this country.

Upson and Andrews identify 39 species and nearly 400 cultivars of wild and cultivated lavenders, providing identifying characters for each. For those who participated in the Plant Study group, the descriptions and detailed drawings of leaves, corollas, bracts, nutlets, and indumentum are especially meaningful. Close-up color photos place flowers from different species and cultivars next to one another, highlighting differences and making identification a bit easier.

Adding to the appeal of the book are thirty full page color plates of individual plants—all painted in soft pastel colors and worthy of the finest old herbals—making one eager to begin a collection. And for those so inclined, cultivation and propagation information is available by species and cultivar, assuring long-lived and healthy plants. Soil, site, hardiness, pests and diseases are covered for each of the major categories: hardy, frost hardy, half-hardy, and tender lavenders. *The Genus Lavandula* isn't just for taxonomists and collectors. A well-researched history of the cultivation of lavender, in personal collections and commercial crops, is included. The history for the United Kingdom contains some well-

known names (Maud Grieve, Gertrude Jekyll, and Norfolk Lavender) and some not so well-known but equally important. The overview of North America recognizes the efforts of John Bartram, Thomas Jefferson, and Bernard M'Mahon.

Though Jocelyn noted, in 1672, that "Lavender is not for the climate" [of North America], not everyone agreed. We now have large commercial operations, especially on the West Coast, and lavender is commonly grown throughout the country. By following the advice of Upson and Andrews, lavender can be a reliable garden plant for most gardeners. For the more serious, this book is indispensable as a guide to , identifying, collecting and growing lavenders.

Katherine Schlosser

The Genus Lavandula

Tim Upson and Susyn Andrews
442 pp, 30 color plates, 4 b/w photos, 126 color photos, 28 maps, 41 line drawings, 12 tables. Hardcover.
ISBN 0-88192-642-6. \$49.95.

What members are doing



Girls In Science

Tom Harville and
Marlene Kinney

Katie Vogel, an educational specialist with the Museum of Natural Science in Raleigh, has been working with The Girls in Science Club at Eaton-Johnson Middle School in Henderson, NC. The fourteen girls were exposed to many areas of science and spent a considerable amount of time examining the water quality of a stream that runs through Fox Pond Park. As an end of school project the girls decided to clear the area surrounding the streambed. Katie took this

exercise another step and contacted Tom Harville regarding native plants for the girls to use. Tom had been

working on a new plant rescue site that had exactly the plants needed for the stream site, notably Yellowroot, *Xanthorhiza simplicissima*. The week prior to the cleanup, Marlene, Katie and Tom dug many bags of Yellowroot, Christmas ferns, *Polystichum acrostichoides* and Lady ferns, *Anthyrium asplenoides* for the project. The girls planted all of these plants along the stream bank and in wash areas. Hopefully this experience will help these girls to be even more aware of Science and Nature working together.



Piedmont Land Conservancy Events

P.O. Box 4025
Greensboro, NC 27404-4025
phone: 336-691-0088
email: info@piedmontland.org

October 22, 2004 – Forever
These Lands Art Reception
Center for Creative Leadership in
Greensboro, 5:30-7:30pm

....featuring PLC photographers
Ginny Weiler and Gary Carter,
along with other artists. Wine
and hors d'oeuvres. No RSVP
needed.

North Carolina Wild Flower Journal

*The 2004 issue of our annual journal will have a theme of "winter berries."
Any member is welcome to submit an article on a related topic. If you have an
idea for another topic, please contact the editor.*

Deadline for submissions is October 30.

*Katherine Schlosser, Editor
1402 Bearhollow Road
Greensboro, NC 27410
336-855-8022 kathyschlosser@aol.com*

NATIVE PLANT NEWS

*The Newsletter of the North Carolina
Wild Flower Preservation Society
Totten Center 3375 UNC-CH
Chapel Hill, NC 27599-3375*



October 9 – 10, 2004

Fall Outing: Sandhills and the Gamelands

Gift idea for the approaching winter holidays

...Looking for a gift idea for a birthday,
anniversary, Mother's Day, Father's Day?
...Need a "Thank You" or hostess gift?
...Just want to remember someone special?

Send a one year membership to the North
Carolina Wildflower Preservation Society.
It's a thoughtful gift, and one that they will
remember with every issue of the newsletter
and the annual Journal. It also entitles them
to participate in all activities of the Wild
Flower Society.

Send your check for \$25.00, made out to
NCWFPS, to:

Tom Harville, Treasurer
104 Birklands Drive
Cary, NC 27511

Include the recipients Name, Address,
Telephone number, and Email address.

We'll even send an appropriate card an-
nouncing your gift – just tell us what event
you are celebrating, and how you want the
card signed.

NORTH CAROLINA NATIVE PLANT PROPAGATION HANDBOOK

**Available to NCWFPS members for \$13.00 each (\$18.00
by mail)***

Regular retail price: \$15.00 (\$20.00 by mail)*

Wholesale price: \$10.00 (minimum purchase: 5 copies)
(wholesaler responsible for collecting and paying taxes)

Send your orders to:
Marlene Kinney
4900 Richland Drive
Raleigh, NC 27612-3522

*Includes North Carolina taxes.

