

# Field Notes

NEWSLETTER OF THE **FRIENDS OF PLANT CONSERVATION**  
SUPPORT GROUP OF THE NC PLANT CONSERVATION PROGRAM, NC DEPARTMENT OF  
AGRICULTURE AND CONSUMER SERVICES, RALEIGH, NC

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## Contents

From the President, Bruce Williams	2
<i>Epidendrum magnoliae</i> (the green fly orchid) in North Carolina David McAdoo	6
From The Library — Plant Conservation: A Natural History Approach Tom Baugh	8
Member in the news, David Blevins	9
Friends of Plant Conservation	10
Staff Update	11
NCPCP Preserves List	12
Literature of Interest	13
2009 ANNUAL MEETING MINUTES	14
2010 Wish List	15
<b>MEMBERSHIP RENEWAL FORM</b> and Benefits of Membership	16

## Notes from the Annual Meeting

### 2009 Annual Meeting Panel Discussion: “From Seed to Fruit: Translating the Vision into Action”

Moderator: Gene Cross

Panel: Alan Weakley, Rob Sutter, Cecil Frost,  
Tony Avent, Rob Evans

#### Opening statements (summarized):

Alan Weakley: More and more land is in conservation status, but the total amount available is declining due to development and other issues. Our generations (those represented here today) have to do this work of conservation. We can control what happens today, though not what will happen in 100 years. Conservation of species is a mission shared by many organizations—federal, state, local and private—and NCPCP must work with these and others to fulfill its sole mission: species conservation. We must look at and consider the broad conservation mission of other agencies.

Rob Sutter: Preserves are an essential way to look at biodiversity management. There is also a need for buffering areas between highly managed areas, which will require varying levels of management. As for climate change, we need to be thinking about current threats to species and manage those so we have something left to protect as climate changes progress. NCPCP should be an advocate for species at risk, concentrating on advocacy for the preservation of threatened species.

Cecil Frost: 1) In the eastern U.S., many species will not survive outside preserves.

2) Many threatened species are fire dependent, which means we have to manage to keep the canopy open in some areas.

3) We can't underestimate the importance of good hands-on management. This is a good role for botanical gardens.



4) How we all work together will influence the outcome—conversation about saving species needs to be the underpinning of conservation efforts.

Tony Avent: 1) We all want plants conserved, and the best way to do that is to explain the benefits of plant conservation to the general public.

2) Money for conservation efforts comes from the private sector and they need to know what they will get out of it.

3) Everything is either growing or dying. Talk about slowing growth (development) to save plants won't work. We are dependent for survival on growth, and the private sector is where that growth will happen.

4) Get plants out to people. Propagate the plants of concern and get them out. People won't be interested in conservation if they can't see the plants.  
5) We have to let people into preserves. We can't keep them locked up and pristine.

Rob Evans: Preserves for the protection of rare, threatened, and endangered plant species in their natural habitats is the best way we have to keep this the State that we know and love.

*Continued on page 3...*



## Friends of NC Plant Conservation

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## FROM THE PRESIDENT...

The first year of the North Carolina Friends of Plant Conservation has been a humbling experience but through the efforts of dedicated members and Board, we are off to a solid start. The first steps are small but they will establish a solid foundation for future growth and progress. Some of the highlights of this year's accomplishments include:

- Sign-up of over 100 members
- Establishment of membership guidelines
- Development of a long term strategic plan
- Published 3 beautiful and informative newsletters
- Developed a dedicated Website (<http://www.ncplantfriends.org> )
- Formed a structure of committees for organizational action
- Provided support for NC Plant Conservation Efforts
- Organized the 2nd Annual Meeting at the NC Botanical Garden
- Produced a 30-second commercial for NCFOPC
- Aired this commercial over 200 times on Charlotte, Raleigh, and Wilmington channels

For 2010, the organization will need to build on this year's successes and increase membership. To spread the word of plant conservation to all people of North Carolina, growing the membership is essential. A vibrant active membership is essential to our future success. Please become active in Committee assignments by contacting a director in your area, it is how you as a member can really make a difference for saving North Carolina plants and their habitats. If you are undecided on how you can help, please give me a call or email, we have lots of challenges for everyone.

Bruce Williams  
Business: 910-313-6785  
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*Alnus viridis* ssp. *crispa*, green alder  
NC Status: Significantly rare-disjunct.  
NC Rank: S-1: Critically imperiled



## *Annual Meeting continued...*

### Discussion and questions from the audience

**Gene Cross:** Is the preserve system a logical way to go? How do we make the various agencies better integrated?

**Avent:** Encourage everyone to join the Friends of Plant Conservation. Give one-year complementary memberships to related organizations.

**Sutter:** Get land managers together to talk about management issues.

**Weakley:** There is a great deal of inter-agency communication going on now, though there could always be more, but there are underlying mission differences. Regarding Tony's comment that support for land conservation will come from the desire of people to "recreate" on publicly-owned land—we need to find a way to allow some kind of access or convince people of the value of pristine preserves. Conservation money stagnates when people don't know or understand the issues.

**Audience question: Impact of ex-situ seed and plants on private or public land.**

**Evans:** There is no benefit to individuals having rare plants in their private gardens. Collecting rare plants and moving them to gardens does nothing to protect the species.

**Avent:** Franklinia wouldn't exist today if it had not been brought into cultivation. Fraser fir has had lots of good PR, people know what it is, so they are more likely to be interested in saving them.

**Frost:** The reason for enactment of the Plant Conservation Act was that rare plants were being dug flagrantly from the wild. The Plant Conservation Program has gotten that under control. Individuals can still dig and sell plants, but need a permit to do so legally. One benefit to rare species in yards—people get to know and love them. We can back off some of our protectionism.

**Audience question: Is education an effective tool for plant conservation?**

**Avent:** Get nurseries selling rare plants to donate a percentage toward plant conservation. Nursery industry would support this kind of effort and it would be good plant PR. "Conservationists would rather see a plant go extinct than have nurseries propagate it."



**Frost:** Once a rare species is in a back yard or nursery, it is no longer useful for re-introduction into a natural habitat. This is not a means of plant conservation.

**Weakley:** Regarding cultivation of rare species, we don't know enough about pollination, germination, and other plant requirements. Nurseries could help with this.

**Cross:** We need that kind of basic botanical information.

**Audience question/comment: We need to be speaking to gardeners and getting plants into gardens.**

**Evans:** There has been a pitch to place a premium on the sale of Venus flytraps, with that premium going to conservation efforts. Desire, fed by illegal poaching and seed collecting, is depleting the supply.

**Audience: Is there a role for ornamental horticulture in plant conservation, something along the lines of the National Wildlife Federation Backyard Habitat program?**

**Evans:** We would love to have something like Franklinia in the wild and in cultivation.

**Audience:** The role of a botanical garden, like a physician, is to do no harm. Cultivation is not the same thing as conservation. (J. Randall)

**Audience: Maintaining preserves is important for conservation. Thinking about climate change and the possibility that we will have to move plants by hand into other preserves: can NCPCP work in partnership with other land managers to extend the range of a species in a controlled way?**

## *Annual Meeting continued...*



**Evans:** We could create three preserves, one in the mountains, in the Piedmont, and in the coastal plain, but that's an extreme.

**Avent:** To plant purists, this would be like claws on a blackboard. Yeah – would be a great idea.

**Evans:** We would have homogenization of natural areas. Invasives, for example, have changed the landscape in some areas.

**Frost:** We have used great restraint in the past. We need rules to govern how we move plants. Restoration in response to global warming may require some changes in how we look at natural areas. If we move plants, we need to look for preserves with enough similarity to encourage survival.

**Audience:** I'm skeptical of preserves working as a conservation technique, especially with species migration in the face of climate change.

**Evans:** Regulations are one answer, that nobody likes. Establishing pollinator pathways and encouraging a voluntary preserve system are other answers.

**Frost:** Land use regulations might not do anything worthwhile because of the management needs. Managed preserves are needed.

**Avent:** An arbitrator is needed to resolve the conflict between conservationists and businessmen.

**Audience:** Need to involve private landholders in the effort. Land trusts are good, but only hit the surface.

**Avent:** An arbitrator could help by educating people and thus avoiding the legal system.

**Evans:** Private landowners aren't bound by regulations.

**Avent:** Plants would win.

**Frost:** I can see it now: Judge Judy in Botany Court!

**Audience:** We need to integrate education and preservation. Is Friends of Plant Conservation ready and able to try to integrate these two efforts?

**Avent:** Friends of Plant Conservation would be a great group to take that role.

**Audience:** Could the Friends group organize a statewide conservation convention?

**Aud. (J. Randall):** There is a need for genetic diversity, and cultivated plants tend to lose that diversity.

**Audience:** The NCBG sells seeds that go into private gardens.

**Aud. (J. Randall):** That works because these plants are not intended to serve a preservation role.

**Avent:** Propagation can serve as a means of conservation, just not in-situ.

**Audience:** Funding sources often mandate in-situ preservation.

**Audience:** Need to keep in mind the distinction between endangered/regulated species and others. Propagation at a garden level can be opening a Pandora's box. Keep this distinction in mind in discussions.

**Avent:** A premium on selling plants and donating that money would not be considered a tax by the nursery industry. It would be more like the Voluntary Royalties paid on patented plants.

**Audience:** Friends of Plant Conservation could maybe do more for management—those federal, state, and local agencies mentioned earlier by Weakley are not coordinated. The Friends group should be pro-active.

*Continued...*

## *Annual Meeting continued...*

**Evans:** The Friends organization is working on the establishment of a stewardship fund which might help in this area.

**Audience:** Don't underestimate the local level...there is a Chatham Co. conservation group now working on funding a plan for county planning. Education activities might encourage more counties to do something similar.

**Audience:** Without more money, preserves will remain small sites well into the future.

**Weakley:** Small is not innately set up to fail. We can neither underestimate nor overestimate the value of small preserves. They may be our only choice in developed areas.

**Evans:** There is often no choice. If we establish a small preserve, there may be opportunities to expand it in the future. In the meantime, a small preserve can be more expensive to manage, in part because invasive species tend to migrate in more easily.

**Sutter:** Animals tend to need larger areas than plants. Small preserves may maintain an ecosystem, but it won't thrive. They are an option, but need active management.

**Audience:** Is there a way to coordinate management in a system of preserves. What would it take to set up a partnership to do this?

**Weakley:** The Natural Heritage Program registry is a model to follow. A cooperative agreement for protective management without duplicating efforts would be needed.

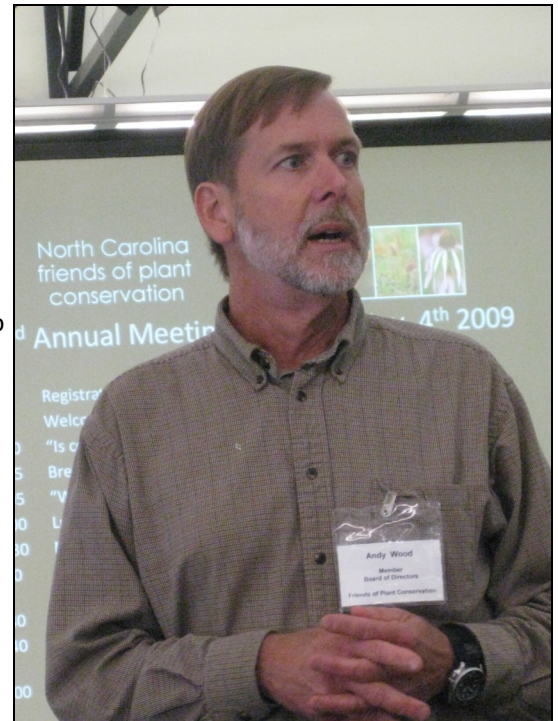
**Sutter:** These are good first steps. Keep in mind the ultimate goal is permanent protection. We would need formal, legal agreements. The first step is a lower level of co-operation.

**Weakley:** Signed agreements without follow-up are not much good. NCPCH has only 3 employees.

### **Time called.**

Gene Cross thanked the panelists and participants, suggesting that we would put a summary in the Friends of Plant Conservation newsletter so all members have an opportunity to consider and comment on the issues and offer suggestions for implementing ideas.

*Ed: These notes are in no way to be considered the verbatim word of the participants, unless quoted, nor to represent the complete position of each participant on the issues. KS.*





# *Epidendrum magnoliae* (the Green Fly Orchid) in North Carolina

David McAdoo



*Epidendrum magnolia* plant in its full blooming "glory"



Close-up of individual flowers

Photos by David McAdoo.

As many of you know, *Epidendrum magnoliae* (the Green Fly Orchid) reaches its northern limit in North Carolina. What makes it a special plant is that it is reported to be the only epiphytic orchid in North America that grows outside of Florida.

Many years ago when I moved to North Carolina I spent several summers trying to find this plant. In the literature there are references to it growing around Lake Waccamaw, but I have yet to find it there. It typically grows in and among resurrection fern which does a good job of hiding the orchids.

It turns out that Mark Rose, a Plant Conservation board member, and I were on a plant trip to the coast one weekend some years ago, and we got talking about the plant. Although he had seen many plants while he lived in Louisiana, he had been looking for years in North Carolina and had never found it here either. Mark said that if we were in Louisiana he would know where to look for plants. When he described that habitat I told him that I knew an area like that on the edge of the Green Swamp Nature Preserve.

Mark said that plants are typically found growing on low hanging branches over water. The water mitigates some of the low temperatures that we get from cold freezes along the North Carolina coast and that allows the plants to survive. We decided to drive to the place that I knew to see if we could find the plant. The area that I drove to is deep in the middle of the swamp by way of some dirt roads. It is not a place where you want to try to go after heavy rains because you will sink in the mud. To make a long story short we got to the creek, got out of the car, looked up into the trees and there were plants in full bloom! Over the years we have seen a couple other colonies growing in the trees along that same creek. Several weeks after finding the first colony I came back with some pole climbing spikes used by telephone repairmen. I climbed up the tree and was getting set to take some pictures when a snake poked its head out of a knot hole in the tree right above the orchid colony. Needless to say I didn't stay around to find out what kind of snake it was and beat a hasty retreat out of the tree.

Since finding plants in the Green Swamp I have seen it in several other North Carolina areas. One that is very easy to get to is along Governors Road that goes east from the town of Winnabow. The "town" is a cross-road located about 15 miles south of Wilmington and is on US 17. Head east on Governors Road for about 2.5 miles until you come to the first substantial bridge across a creek. Park by the bridge and start looking with binoculars into some of the high branches of the large bald cypress trees along the creek on the north side of the bridge. The trees are

## *Epidendrum magnoliae*

loaded with resurrection ferns but scattered in with them are several large colonies of the orchid. In addition to the Green Fly orchid there are a couple of other orchids that you can find along the water during the right season. On the west side of the creek there are plants of *Platanthera flava* (blooming in August) and many plants of *Spiranthes odorata* (late October). When they are in bloom you can smell the ladies tresses before you see them along both sides of the creek. I have been told by a friend that if you can get a canoe and go up and down the creeks in this area you can see *Epidendrum magnoliae* all along. I do need to warn you if you go hiking along the creek to be on the lookout for snakes (water moccasins) as you walk because they like the area also.

Until 2000 *Epidendrum magnoliae* was called *E. conopseum*. The name changed when it was discovered that there had been an earlier (by several weeks) published name for the plant. The Flora of North America reports that its distribution is from North Carolina south along the coast and around to Louisiana. It does not occur in Texas but is in northeastern Mexico. The *Manual of Vascular Flora of the Carolinas* only lists Columbus County for the plant, but I am aware of several Brunswick County sites. In the draft Flora of the Carolinas, Virginia, and Georgia, and Surrounding Areas by Alan Weakley the primary blooming time is July in North Carolina and extends into October as you go south. He indicates that the plant is rare in North Carolina but can be locally common in its range.

Although this orchid is rather undistinguished looking it can be an adventure to find it and when you do find it in North Carolina you have found a prize.

David McAdoo  
Kernersville

### *Epidendrum magnoliae*: North Carolina Rank

**S2:** Rank definition = Imperiled in North Carolina due to rarity or some factor(s) making it very vulnerable to extirpation from the state. Typically six to 20 occurrences or few remaining individuals (1,000 to 3,000).

### North Carolina Status: SR-P (Significantly Rare)

Any species not listed by the N.C. Plant Conservation Program as Endangered, Threatened, or Candidate, which is rare in North Carolina, generally with 1-100 populations in the state, frequently substantially reduced in numbers by habitat destruction (and sometimes also by direct exploitation or disease). The species is at the periphery of its range in North Carolina. These species are generally more common somewhere else in their ranges, occurring in North Carolina peripherally to their main ranges, mostly in habitats which are unusual in North Carolina.



A colony growing in an old cemetery in northern South



A typical colony growing on the side of a tree along the boardwalk in the Four Holes Swamp at South Carolina's

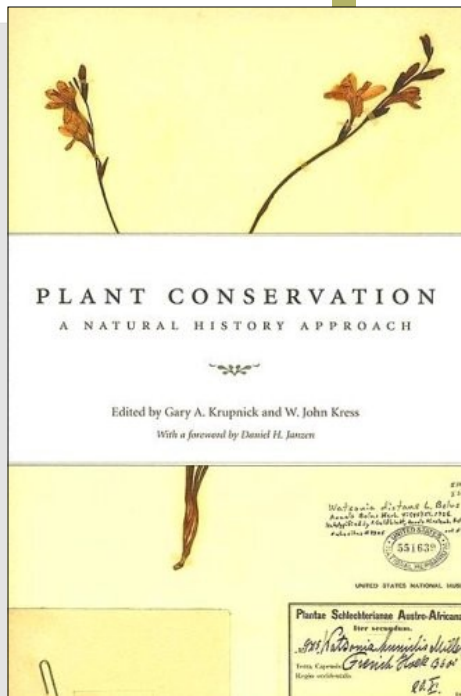
Photos by David McAdoo.



## From The Library....

### *Plant conservation: A natural history approach*

Krupnick, G.A. and W. John Kress, eds. 2005.  
University of Chicago Press. Illinois. USA.



*Plant Conservation: A Natural History Approach* includes 39 papers from 48 authors. The text is divided into four parts including (1) plant diversity, past and present; (2) plant diversity, habitats and taxonomic groups; (3) and contemporary causes of plant extinction with a paper on the impacts of global climate change. The section on conservation of plant diversity (4) includes a chapter on management strategies with a thought provoking paper on ex situ plant conservation.

In the Preface to this volume the editors, Krupnick and Kress discuss the importance of “natural history museums, herbaria, and botanical gardens” in enriching a natural history approach to plant conservation. The book opens with a well-documented survey of the evolution of land plant diversity followed by two equally well-documented chapters on current terrestrial and marine diversity. Scott Wing of the Smithsonian Institution, reminding us that extinction is a natural phenomenon, visits extinctions over paleontological time to the present describing global extinction rates for the Westphalian-Stephanian, Permian-Triassic, Cretaceous-Tertiary, and contemporary periods.

Other contributing authors, explore the contemporary causes of plant extinction in the Brazilian component of Amazonia, on Caribbean islands, Madagascar, coral reefs, and North Atlantic kelp communities. The impacts of invasive species and habitat fragmentation are considered along with human-induced (e.g. climate change) and natural (e.g. hurricanes [1]) causes. Case studies of tropical and subtropical habitats of prime importance in plant diversity and conservation include the Ecuadorian Andes, the Ramal de Guaramacal in the Venezuelan Andes, the Guiana Shield, the Pacific Oceanic Islands, and the Gaoligong Mountains of southwest China and North-east Myanmar.

I found Stephen Blackmore’s chapter on ex situ plant conservation particularly interesting. The role of botanical gardens in ex situ conservation has been subject to the same controversies as that of zoos and aquaria in the conservation of animal life. Depending on who one reads, up to one-third of all flowering plant species are facing extinction in the present century. As with animals, only the most optimistic feel that much can be done to

reverse the situation globally, there are simply too many of us, requiring more and more space and resources in order to make and then support even more of us. It is possible that the rapidly unfolding biodiversity tragedy can be mitigated, at least to some extent by ex situ conservation in botanical gardens or special botanical facilities. Consider Blackmore’s comment that there are at least six million accessions of living plants in the world’s 2,000+ botanical gardens. Like the debate over global warming, the debate over the role of ex situ conservation needs to move beyond denial to response and substantive action including the dedication of resources and the training of ex situ plant conservation specialists. If we can’t save the habitats, we should do all that we can to save the living species and, if that isn’t possible, we must save the genomes. Ah, to live in a world where no living thing faced extinction. But we don’t live in that world. Perhaps we can’t save everything, but we should use every tool at our disposal.

This is a very well-documented, if somewhat fragmented book. The number of authors and the scope of coverage leads to a readable tour of plant conservation from the perspective of natural history as reflected in the world of herbaria, botanical gardens, and museums. Although there is little material from North America, the causative factors in the decline of biodiversity remain much the same wherever you find them. As Gary Krupnick, one of the editors, points out, “The number of species threatened with extinction due to human activities is at an all time high...”, and this applies regardless what continent a plant is found on.

Tom Baugh  
Hidden Springs

[1] I wonder how long we will be able to consider major cyclonic storms as ‘natural’?

List price  
Hardcover: \$71.16  
Paperback: \$32.00

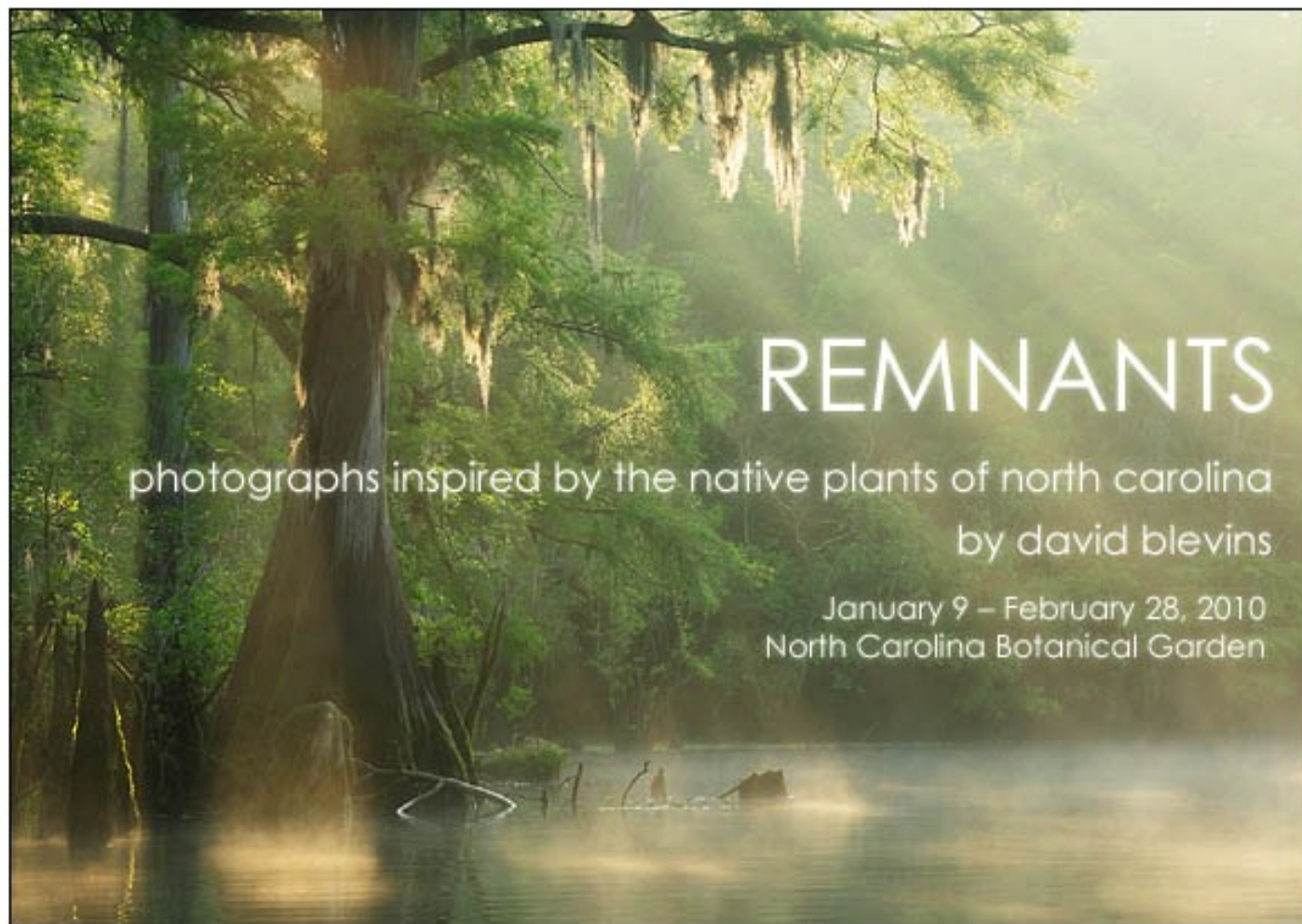
Available from  
Amazon.com:

Hardcover  
New from 65.00  
Used from 64.47

Paperback  
New from 26.50  
Used from 22.00



## Member in the news... David Blevins



# REMNANTS

photographs inspired by the native plants of north carolina  
by david blevins

January 9 – February 28, 2010  
North Carolina Botanical Garden

**In the Eleanor Smith Pegg Exhibit Hall,  
Jan. 9 - Feb. 28, 2010:**

**Remnants - photographs inspired by the  
native plants of North Carolina.  
An exhibit of fine art prints from natural  
places  
by David Blevins**

North Carolina was once a wild land of diverse natural habitats. Although much has been lost, examples of some of this diversity can still be found in remnants of the natural landscape. David Blevins creates photographs in these places where nature is allowed to freely express itself.

This exhibit features photographs of common, rare, and newly discovered plants, as well as natural landscapes from across NC. The images provide a glimpse of what remains of North Carolina's natural environments on public lands and properties managed by the Nature Conservancy, land trusts, the NC Plant Conservation Program, and the NC Botanical Garden.

David Blevins has been photographing nature for most of his life and has been publishing photographs for 10 years. He created photographs for two books while completing his Ph.D. in forest ecology at the University of British Columbia. For the last 5 years he has been making photographs of the plants, animals, and landscapes of North Carolina for a coffee table book on natural communities.

### ***Remnants***

**January 9—February 28,  
2010.**

**N. C. Botanical Garden  
Chapel Hill, N.C.**

# *Friends of Plant Conservation...*

## **Friends of Plant Conservation Mission**

The Friends of Plant Conservation Foundation supports North Carolina Plant Conservation Program (NC PCP) efforts to conserve and protect North Carolina's imperiled native plants in their habitats.



## *What we do...*

### **Vision**

Through advocacy, education, partnerships, and fundraising and development, the Friends of Plant Conservation Foundation insures that all NC imperiled plants are protected in their natural habitats through a statewide network of conserved or pre-served sites and NC citizens' commitment to environmental stewardship.



## *What we believe...*

### **Core values**

Members of the Friends of Plant Conservation are committed to these values:

- ★ Conserving North Carolina's diversity, especially our native flora and imperiled plants
- ★ Upholding the regulations of the N. C. Plant Conservation Program

- ★ Seeking stakeholder and other public constituency input when taking actions and positions
- ★ Recognizing that issues have human and social dimensions, not just environmental ones
- ★ Supporting and respecting the role of volunteers for the organization
- ★ Educating the public about plant conservation issues

### **SPECIAL NOTICE**

**The Board of Directors voted to adopt the following design, created by David Blevins, as the logo for the Friends of Plant Conservation.**



### **Board of Directors News**

Due to a heavy schedule, Benson Kirkman submitted his resignation from the board, with regrets and promises to return as his other commitments wind down.

The board enthusiastically voted that Tom Baugh, Hendersonville, NC, be appointed to fill Kirkman's unexpired term.

Many thanks to Benson Kirkman for his service and support, and a hearty welcome to Tom Baugh.

## **FRIENDS OF PLANT CONSERVATION**

### **ACCOMPLISHMENTS 2008-2009**

- ★ Grew to nearly 100 members
- ★ Organized the annual meeting in Chapel Hill
- ★ Established membership guidelines
- ★ Developed a long term strategic plan
- ★ Published quarterly newsletters
- ★ Produced and ran a 30-second television commercial (200+ runs Raleigh, Charlotte, Wilmington)
- ★ Developed a Website
- ★ Formed a structure of committees for organizational action
- ★ Provided volunteer support for NC Plant Conservation Efforts





*You forget  
that the  
fruits  
belong to all  
and that the  
land belongs  
to no one.*

*~ Jean-  
Jacques  
Rousseau,*

*Discours sur  
l'origine et les  
fondements de  
l'inégalité parmi  
les hommes,  
1755*



## *Update from NCPCP staff. ....*

We thought you might be interested in reading about some of the recent activities of the N. C. Plant Conservation Program (PCP) staff.

Various surveys and monitoring efforts were conducted. These included:

- Annual census of endangered sunflower populations at 3 Plant Conservation Preserves
- Joint survey with NC Natural Heritage Program (NHP) in and around the Eastwood Plant Conservation Preserve revealed populations of a number of locally unusual and rare insect species.
- Documenting seed production in a state threatened species with support of NCDA & CS entomologist. Severe insect predation problems were noted at nearly all sites in NC, including those under conservation protection.
- With support of a private landowner, PCP organized a survey by volunteers and staff which documented a new population of a federally and state endangered species. We are hoping to add this tract to one of our existing Plant Conservation Preserves. Considerable time was spent preparing an application for federal funds to support purchase of the property
- Field reviews were conducted with NHP staff of several important privately owned imperiled plants sites to determine feasibility for inclusion in the Plant Conservation Preserve System
- Several trips with NCSU staff and students to the Pondberry Bay Plant Conservation Preserve to discuss research and management needs

Management activities were conducted at several Preserves:

- With the support of a private contractor, controlled burns were completed on approximately 160 acres at the Eastwood Plant Conservation Preserve
- Established mowed fire lines to subdivide a large and complex block planned for burning in the upcoming year and mechanically reduced shrub encroachment on over 3 acres of overgrown pine savanna at the Boiling Spring Lakes Plant Conservation Preserve.
- Completed a controlled burn at the Pondberry Bay Plant Conservation Preserve (with support a several volunteers)

Volunteer workdays were held at several locations. These included:

- A partnership project with the Eno River Association and Duke University Students to remove

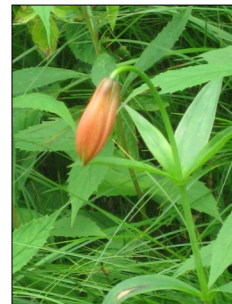
trash from a jointly managed conservation property.

- Several partial days spent removing small woody stems and exotic species at Eno Diabase Plant Conservation Preserve
- Partnership with church in Biscoe to remove wood previously felled by PCP staff as part of plant habitat restoration efforts at the Denson's Creek Plant Conservation Preserve. Firewood was delivered to many citizens in need if heating assistance in the local area.
- Partnership with NCDENR employee, families, and volunteers to remove wood previously felled by PCP staff as part of plant habitat restoration efforts at the Pondberry Bay Plant Conservation Preserve. Firewood was delivered to many citizens in need if heating assistance in the local area.

Staff spent many weeks reviewing site data for imperiled species and developing preliminary assessments of the most important sites in need of conservation work.

Partnership and outreach efforts included:

- Ongoing dialogue and negotiations with Department of Forest Resources and the Nature Conservancy which hopefully will result in more controlled burns occurring at the Boiling Spring Lakes Preserve.
- Various meetings with regional partnerships including the Sandhills Resource Working Group, NC Prescribed Fire Council, and the Greater Uwharries Conservation Partnership.
- 3 formal presentations were made to various groups and organizations regarding imperiled species and plant conservation
- field trip was held at a Triangle area Plant Conservation Preserve for state fiscal specialist to give them a better idea of the type of work challenges and issues faced by PCP staff.



*Lilium grayi* in bud  
(T-SC; S3)

Rob Evans

## *Land under protection. . .*

### **N.C. Plant Conservation Program Preserves**

<b>PCP Preserve</b>	<b>Date Acquired</b>	<b>County</b>	<b>Size (~ Acreage)</b>
Bat Fork & Ochlawaha Bogs	1996	Henderson Co.	20 acres
Boiling Spring Lakes	1999	Brunswick Co.	6,500 acres
Tater Hill	2000	Ashe Co.	900 acres
Long Mountain/Poison Fork	2000	Randolph Co.	78 acres
Denson's Creek	2001	Montgomery Co.	60 acres
Pondberry Bay	2001	Sampson Co.	2,090 acres
Paddy Mountain	2002	Watauga Co.	263 acres
Hog Branch Ponds	2004	Brunswick Co.	516 acres
Eno River Diabase	2004	Durham Co.	300 acres
Melrose Mountain	2005	Polk Co.	318 acres
Eastwood	2005	Moore Co.	180 acres
Big Pond Bay	2005	Cumberland Co.	75 acres
White Oak Mountain	2006	Polk Co.	1,000 acres
Harvest Field	2006	Randolph Co.	30 acres
Hebron Road	2006	Durham Co.	58 acres
Dulany Bog	2007	Jackson Co.	100 acres
Cedar Cliff	2008	Jackson Co.	60 acres
Mineral Springs Barrens	2008	Union Co.	60 acres

### **A Note From Rob Evans, NCPCP Plant Ecologist**

Please join us in supporting efforts to conserve imperiled plants and their natural habitat:

Become a member (see page 16)

Visit Friends website ([www.ncplantfriends.org](http://www.ncplantfriends.org))

Talk to Rob Evans of the NC Plant Conservation Program about conservation opportunities (contact 919-733-3610)

Volunteer to help with specific events, office work, and stewardship activities

Make a financial contribution (see Wish List on page 15 and membership/contributions on page 16).

*Rob*

*An  
investment  
today is a  
legacy for  
generations  
to come.*

*~Rob Evans*

*2009*

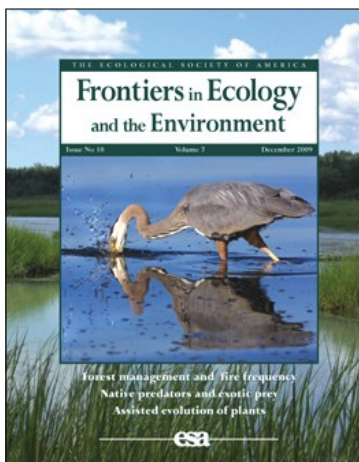


## Literature of Interest...

Abstracts for Literature of Interest are provided as a service. Inclusion does not reflect an opinion or serve as a review by the Friends of Plant Conservation.

**“A role for assisted evolution in designing native plant materials for domesticated landscapes,”** Jones, T.A.\* and T.A. Monaco.

*Frontiers in Ecology and the Environment* 7(10):541-547. 2009.



### Abstract

Developers of native plant propagation materials for wildland restoration may emphasize naturally occurring genetic patterns or, in contrast, the material's empirical performance in comparative field trials. We contend that both approaches have value and need not be mutually exclusive. Anthropogenic influences have pushed many ecosystems across ecological thresholds, to less desirable states, so that actively managing for “domesticated nature” – nature as modified, either intentionally or inadvertently, by humans – is more realistic and more likely to succeed than recreating the original ecosystem. Furthermore, when domesticated nature is the most reasonable objective, empirical performance, together with geographical origin, are plausible criteria for choosing restoration plant material. For altered ecosystems, we suggest that evolution should be assisted by the inclusion of plants that (1) reflect general historical evolutionary patterns, (2) are particularly suited to the modified environment, (3) are able to adapt to contemporary selection pressures, and (4) contrib-

ute to the restoration of ecosystem structure and function.

USDA-Agricultural Research Service, Forage and Range Research Laboratory, Utah State University, Logan, UT  
(E-mail: thomas.jones@ars.usda.gov)

Access information:

<http://www.esajournals.org/toc/fron/7/10>

Submitted by: Tom Baugh, Hidden Springs

If you are aware of an article that may be of interest to other members, please send the information to:

[kathyschlosser@triad.rr.com](mailto:kathyschlosser@triad.rr.com)

# Annual Meeting Minutes

## ANNUAL MEETING

### Minutes

Wednesday, November 4, 2009

The second annual meeting of the Friends of Plant Conservation Foundation, Inc. was called to order at 9:30 a.m. in the Reeves Auditorium in the new Education Center at the N. C. Botanical Garden in Chapel Hill, North Carolina. There were seventy-nine (79) individuals in attendance.

Peter White, Director of the NC Botanical Garden, welcomed the Friends of Plant Conservation to the "Conservation Garden" and to the new Education Center.

C. Bruce Williams, President of the Friends of Plant Conservation, welcomed the group and introduced Commissioner Steve Troxler, who was presented by the board of directors with a lifetime membership in recognition of and appreciation for his efforts for plant protection.

Gene Cross, Director, NCDA&CS-Plant Industry Division, introduced the first speaker, Rob Sutter, who was the first plant ecologist hired by the then new NC Plant Conservation Program (NCPCP).

Rob Sutter addressed the question "Is Conserving Plant Species Still Relevant?" with an informative presentation.

Cecil Frost, second plant ecologist with the NCPCP, entertained and informed the group with an address on "What Do We Know About the Future of our Native Flora, 2100 - 2100?"

Following a break for lunch, a business meeting of the organization was called to order at 12:30. Bruce Williams recognized the efforts of Mike Kunz, board member, in putting together this event. Mr. Williams introduced the board and listed the accomplishments of the board over the past year (copy attached). He then called for comments from committee members present,

noting that Kurt Schlimme (Treasurer), Benson Kirkman (Legislative) and Marsh Smith (Resource Development) were not able to attend. David Blevins (Vice President, Communications), Katherine Schlosser (Secretary, Communications), Paul Hosier (Strategic Planning), Mike Kunz (Programs), Andy Wood (Legislative), Tom Harville (Membership), Mark Rose (Policy & Governance) gave brief statements of their activities. Mr. Williams asked the membership to contact him with any comments, questions or suggestions for the board to consider. The Business Meeting of the organization was adjourned at 1:00 p.m.

Gene Cross introduced Rob Evans, the current plant ecologist with the NCPCP, who spoke eloquently and with humor and optimism on the topic of "Imperiled Plants and Habitats Inextricably Linked: NCPCP Vision."

Gene Cross then introduced and moderated the panel for the afternoon: Alan Weakley, Rob Sutter, Cecil Frost, Tony Avent, and Rob Evans, who were challenged to consider the topic "From Seed to Fruit: Translating the Vision into Action." Each panel member gave a short statement of their position, after which the discussion was opened to the membership. A lively discussion ensued, with a broad range of opinions, suggestions, and questions from the audience. A summary of those suggestions is attached. Mr. Cross suggested that those items be placed in the Friends newsletter for all members to consider.

Mr. Williams presented closing comments and the meeting was adjourned at 3:00 p.m.

Respectfully submitted,

Katherine Schlosser  
Secretary  
November 6, 2009



Peter White



Gene Cross



*Caltha palustris*, SR-P, S-1



*NCPCP Needs...***Plant Conservation Program Wish List**

<b><u>General</u></b>	<b><u>Cost Estimate</u></b>
General Office supplies	\$3000
Gasoline	\$3800
Other materials and supplies	\$5000
Scientific supplies	\$1000
(4) portable 2-way radios	\$1148
PC/Printer	\$6500
(2) GPS Units	\$3000
(2) Digital cameras	\$2200
(2) 4X4 Super duty cab trucks	\$48000
Books	\$1000
Membership subscriptions and dues	\$1000

***Contributions accepted in any amount.***  
***You may specify the category (-ies) you would like to fund.***  
***Make checks payable to:***

**Friends of Plant Conservation**  
**Mail Service Center 1060**  
**Raleigh, NC 27699-1060**



*Campanula rotundifolia*,  
 S-1, SR-P

## For Members

Membership in Friends of Plant Conservation brings certain benefits, among them:

- ★ Association with others committed to plant conservation;
- ★ Recognition in annual reports;
- ★ Quarterly electronic newsletter;
- ★ Reviews of technical and popular books on plant conservation;
- ★ Electronic notification of pending legislation that concerns plant and habitat conservation;
- ★ Preserve steward opportunities (under development);
- ★ Visits to NC Plant Conservation Program preserves;
- ★ Annual meeting addressing current issues with prominent speakers;
- ★ Knowledge that you are assisting with the conservation of North Carolina's imperiled plants in their habitats.

## Time to Renew your membership!



### FRIENDS OF PLANT CONSERVATION MEMBERSHIP APPLICATION

☐ New Membership, ☐ Renewal  
(Check One)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

☐ I am willing to receive the newsletter via email to conserve resources.

☐ I am interested in a FoPCP license plate when available.

#### Memberships/Gifts:

- ☐ Student Member \$5
- ☐ Individual Member \$15
- ☐ Family Member \$25
- ☐ Affiliate Member \$25

Please include the number of members in your organization \_\_\_\_\_

- ☐ Sustaining Member \$50
- ☐ Life Member \$500  
(Five (5), \$100 yearly installments)
- ☐ Gift \$\_\_\_\_\_

#### Indicate activities of interest:

- ☐ Volunteer to assist PCP staff
- ☐ Policy Committee
- ☐ Legislative Committee
- ☐ Membership Committee
- ☐ Financial Stewardship Committee
- ☐ Strategic Planning Committee
- ☐ Program Committee
- ☐ Communications Committee

Send completed form and check to:

Friends of Plant Conservation  
Mail Service Center 1060  
Raleigh, NC 27699-1060

## Thank You !