

# Friends of Plant Conservation

## Field Notes

NEWSLETTER OF THE FRIENDS OF PLANT CONSERVATION

VOL. V, ISSUE 1, FEBRUARY 2013

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

Many thanks to our speakers and Preserve tour leaders, as well as to George Briggs and the NC Arboretum, for making our annual meeting an event to remember.

Thanks also to the many members and friends who joined us for this 3-day event.

**George Briggs**

**Chuck McGrady**

**Valerie True**

**Bob Peet**

**Ed Schwartzman**

**Gary Wein**

**Joe-Anne McCoy**

**Haywood Rankin**

**Bill Thomas**

**Rob Evans**

**Lesley Starke**

## PILLARS OF CONSERVATION



By all accounts, the 2012 Annual Meeting of the Friends of Plant Conservation was a congenial and informative event begun and ended with visits to stunning preserves in the mountains of western North Carolina. *More about that visits on following pages.*

After partaking of a display of breakfast treats, a warm welcome was extended by Paul Hosier, President, followed by greetings from our host, George Briggs, Director of the NC Arboretum in Asheville, and Chuck McGrady who represents District 117 in the NC House of Representatives—a well informed and affable fellow. The day was a bit wet, with lovely gray skies visible through the wall of second story windows, making it easier to be inside for the day.

Valerie True, Blue Ridge Forever, discussed the essentials of successful collaboration to start our morning. She was followed by Bob Peet who shared observations from his 25 years of organizing and conducting the Carolina Vegetation Survey, which is dependent on volunteers.

Rob Evans then presented a program on the nature and value of plant protection via preserves.

Lunch allowed us time to chat with friends made during the hike up Cedar Cliff, to anticipate the walk to Cedar Mountain Bog scheduled for the next morning, and to enjoy a vast array of amazing fiber works hung throughout the Arboretum's education building while enjoying a well prepared lunch.

The afternoon brought a series of quick presentations that kept us awake, entertained, inspired, and educated. Ed Schwartzman, Natural Heritage Program, showed "special plants from special places" in western NC. Lesley Starke, NCPCH, updated us on the status of imperiled plants in western NC; Gary Wein provided background on the Cedar Cliff Preserve and the old growth cedar forest it protects; Joe-Anne McCoy, Bent Creek Institute, discussed the role of seed conservation in plant protection;

*...continued on pg 3*





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Information Processing Technician  
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## *From The President*



Happy Holidays!! This year has been a wonderful year for the Friends of Plant Conservation. The organization, originally just a vision of Gene Cross, Al Elder and Hollis Wild in the early 2000s, the Friends organization has expanded membership, aided the Plant Conservation Program in securing the Butner Cedar Glade property, expanded field trip offerings to Plant Conservation Preserves and held our very informative annual meeting in Asheville.

The Butner Cedar Glade Preserve is now secure thanks to the hard work of the Plant Conservation staff led by Rob Evans. With the final stamp of approval from the NC Council of State this fall, the imperiled plant species found in the cedar glade are protected. The Friends joined with the town and state to set aside the land in perpetuity. Score one for the rare plants at the site!

At our annual meeting hosted by the Mr. George Briggs and the North Carolina Arboretum, attendees expressed their pleasure at the range and quality of the presentations that focused on Plants, Places and People associated with plant conservation throughout the state. With new friendships made and old friendships rekindled, the annual meeting was an important event on the plant conservation calendar for 2012.

Attendance at the field trips to Cedar Cliff Preserve on November 6th and Cedar Mountain Bog on November 8th was at an all-time high with nearly 20 people attending each of the property tours. Attendees got to see first-hand the work carried out by the Plant Conservation Program and Gary Wein with the Highlands-Cashiers Land Trust.

We would like you to be part of the legacy of the Friends of Plant Conservation, the organization dedicated to aiding the Plant Conservation Program in their efforts to secure the future of imperiled plants in their habitats in North Carolina.

Your support of the Friends of Plant Conservation will be greatly appreciated by all who are interested in maintaining populations of imperiled plants in safe and secure sites throughout the state. As you consider charitable gifts at the end of this calendar year, we hope that you will make a special contribution to the Friends of Plant Conservation. In this way, we will be certain that 2013 will be as successful as this past year. Please join others and me throughout the state to assure the future of our plant heritage in North Carolina.

Paul Hosier



## *Just a few of our pillars of conservation:*

Haywood Rankin, owner of Redlair Farms, shared his story of protecting family land; and Bill Thomas talked about the role of nearby citizens in the development and protection of NCPC preserves.

Rob concluded the program with a discussion of restoration efforts at Cedar Mountain Bog.

After a long day of presentations, open discussion, and idea gathering, Paul called the meeting to order for the Annual Meeting of Members, during which Bill Thomas was welcomed to the board, filling the spot vacated by Janet Gray, who was thanked for her service.

The following photos are provided by Mark Rose.



Haywood Rankin



George Briggs



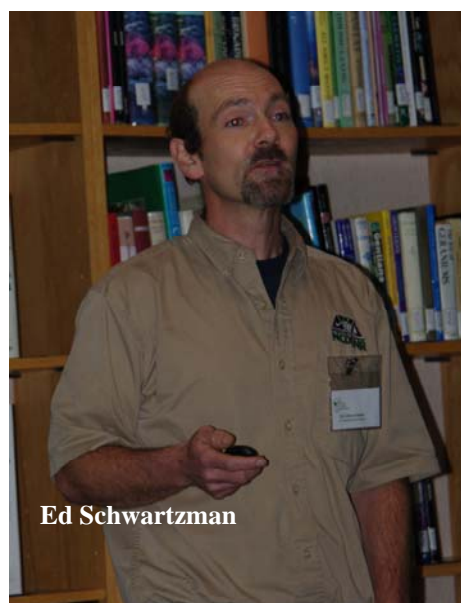
Joe-Ann McCoy



Rob Evans & Bruce Williams



Bob Peet



Ed Schwartzman



Chuck McGrady



## Cedar Cliff Preserve

A steady drizzle started just as we got on the road at 5:00 am on the day before our Annual Meeting, but our spirits were not swayed. By the time we reached Black Mountain it got a little harder to remain excited about the long anticipated visit to Cedar Cliff—for the drizzle changed to snow. We pressed on, reaching the designated meeting place in plenty of time to get a cup of steaming coffee and catch some of the infectious enthusiasm of our fellow travelers.



An hour later, we were just coming over the top of the last tall mountain before reaching Cedar Cliff, and the sun peeked out from the gray sky. By the time we got to the site, the sky had cleared, the sun was bright, and the temperature reasonable.

Having been prepared for the hike by Gary Wein, Highlands-Cashiers Land Trust—who has made a study of the old growth red cedar forest—participants gathered their walking sticks, tightened the laces on their boots, and tucked away water and snacks.

Unfortunately, an Achilles tendon problem prevented me from attempting the steep climb to the summit, so I was dependent on **Mimi Westervelt** (my sister), and friend **Nancy Adamson** to bring back pictures, some of which are shared here with you.

I should mention that in spite of the climb, which was straight up...no switchback on the way!...every single participant was exhilarated when they got back, saying they were glad they made the trip, and glad they didn't know in advance just how steep the climb would be. The view from the top was spectacular, and a fellowship of travelers was formed.





*More Cedar Cliff*





## Cedar Mountain Bog Visit, Thursday morning

The Preserve is based around a unique wetland type, often referred to as “mountain bog.” The example protected here represents a mere fragment of wetlands that were historically extensive in the region.

The surrounding upland forest is also unusual due to the number of pitch pine present. Pitch pine is normally indicative of frequent fire.

The site features the only apparently stable population of the federally and state endangered mountain sweet pitcher plant (*Sarracenia jonesii*) in NC.



The floor of the bog is spongy sphagnum, with the water table not far below the surface.

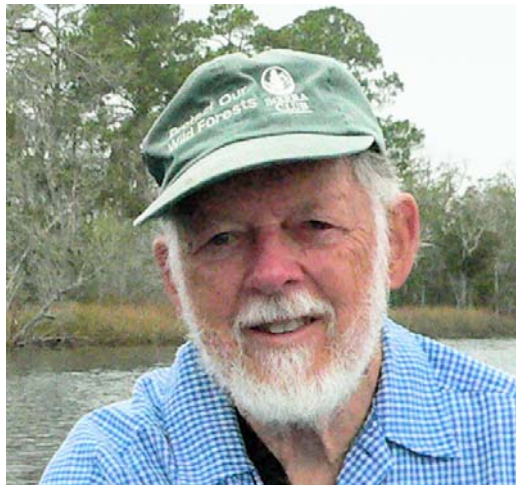


Efforts of staff and volunteers to slow the movement of water through the bog and to clear undergrowth and open the canopy were evident throughout the bog.



## Board News

### Introducing new board member Bill Thomas



#### William R. Thomas (Bill)

Retired chemical engineer with PhD from U. of Wisc, BS from Princeton, 1951. Transferred by DuPont to Brevard NC in 1978 and became involved in the Sierra Club.

Led effort to put the Horsepasture River into the National Wild and Scenic River System in 1984-6, became chair of the NC Chapter in 1989, worked on the Pisgah/Nantahala Forest Management Plan in the early '90's, worked to keep a Duke Power pumped storage reservoir out of the Jocassee Watershed in the late '80's, and was Sierra Club's point man in establishing Gorges State Park in the late '90's.

Was treasurer for Friends of the Falls, which successfully convinced the State to add the waterfalls to DuPont State Forest in 2000. Served on the Governor's Western Environmental Council in 1989, received Friends of the River award in 1993, the Order of the Long Leaf Pine in 1997, and Outstanding Leader in Conservation award from Wild South in 2008.

Served for 6 years on the board of the Carolina Mountains Land Conservancy. Is now a member of Gorges Park Advisory Committee. He lives in Sherwood Forest and was the first chair of their Green Areas Committee overseeing 300 some acres of forested wild land and supervising a biological inventory of the Green Areas, as well as serving as co-chair of the Trails Committee, maintaining 20 miles of trail in the Green Areas.

He is an ardent birdwatcher, hiker and camper. All he knows about plants and trees has been gained by walking in the woods behind people who really do know about these things.

### Former board member Tom Baugh

Tom had one incomplete manuscript describing his activities at Bar Fork Bog when he resigned. He continued to work on that document and submitted it to the *Natural Areas Journal*. It has been accepted for publication in the January issue:

Baugh, T. and K. K.Schlosser. [In press.] Management Considerations for the Restoration of Bunched Arrowhead *Sagittaria fasciculata*. *Natural Areas Journal*. 33(1) [January 2013].

## FoPC Outreach



Dale Batchelor and John Thomas set up a great display for the Wetlands Festival in Raleigh recently, braving rain and rapidly diminishing crowds.

This is a great way to spread the word about plant conservation and the Friends, so if you know about an opportunity, let us know.

Thanks Dale and John!



## Stewards at Work

Lesley Starke, Research Specialist and Preserve Steward Coordinator, has been compiling the number of hours invested by volunteers assisting with preserve management.

From January 2012 through September, more than 200 hours have been put in by Stewards and others volunteers. Activities have included tree, shrub, and invasives removal, trash removal, planting, boundary walks, being on hand with water at burns, and imperiled plant counts.

If you are helping in any way with preserve management or assisting staff, be sure to send your hours to Lesley at

[Lesley.starke@ncagr.gov](mailto:Lesley.starke@ncagr.gov)





## How *Helianthus porteri* Came to North Carolina

*Helianthus porteri* is a small, annual sunflower that thrives in the harsh, shallow soils of granitic outcrops. It is found almost exclusively in the north central counties of Georgia where it is often called the Confederate Daisy. It grows and reproduces under extreme conditions of intense light, low pH, shallow soils, and sudden and harsh fluctuations in temperature and water. It has been documented that entire outcrop populations have been killed by severe and sustained drought before setting seed, only to reappear the next year from dormant seed in the shallow soils.

In North Carolina it is found at the granitic flatrocks of the Mitchell Mill State Natural Area, in Wake County, and at the low elevation granitic dome of the Rocky Face Mountain Recreation Area in Alexander County. It flourishes in both locations, forming spectacular masses of golden yellow blooms in September and October.

These colonies of *H. porteri* may be so extensive as to account for as much as 62% of the biomass of granitic outcrop communities. At Mitchell Mill, colonies often spread out of the flatrocks and into the ditches along the adjacent roadway. At

weeds and grasses in open field conditions for any prolonged period of time.

*H. porteri* is not native to North Carolina. It arrived as part of an ecological experiment focused entirely on *Diamorpha smallii* (known as *Diamorpha cymosa* at that time). *H. porteri* (known as *Viguiera porteri* then) was not part of the experiment and was never mentioned in it. The study was wide-ranging and ambitious: In the winter of 1959, small populations of *Diamorpha smallii* were transplanted in blocks of sod from 16 geographically separate outcrop communities, in several states, to an artificially created experimental granite outcrop at Emory University. In a reciprocal experiment, small population samples of *Diamorpha smallii* were transplanted from a single, large outcrop (Mt. Arabia, Lithonia, Georgia) to each of the 16 outcrops sampled.

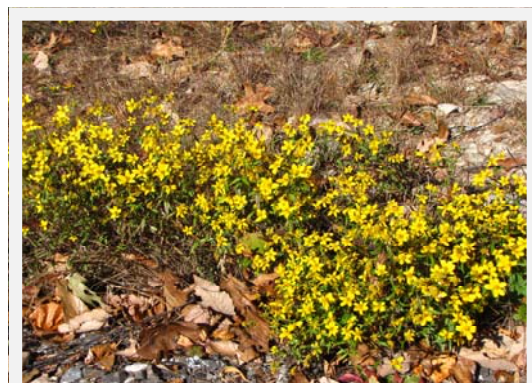
Mitchell Mill and Rocky Face Mountain were each one of the 16 original sites selected. The purpose of the experiment was to describe the ecotypic differentiation of *D. smallii*, that is, its variation throughout its climate range, and its adaptation to new and varied habitats. Although *H. porteri* was not involved in the experiment, it was evidently present in some of the sod blocks and became established in the new environment.



*Helianthus porteri* massed bloom



Rocky Face Mountain



*H. porteri* at Rocky Face

Rocky Face Mountain, colonies may spread into the flat clay and gravel adjacent to the parking area. But in controlled experiments, *H. porteri* has been unable to compete with

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## *Helianthus porteri*

Thus *Helianthus porteri* came to North Carolina in February of 1959, from its original home at Mt. Arabia, Lithonia, Georgia. Mt. Arabia is now part of the Davidson-Arabia Nature

Preserve, which is also part of the larger Arabia Mountain National Heritage Area.

~Herb Amyx

### References

McCormick, J. F. and R. B. Platt 1964 Ecotypic Differentiation in *Diamorpha cymosa*. *Bot. Gazette* 125: 271-279

Mellinger, A. C. 1972 Ecological Life Cycle of *Viguiera porteri* and Factors Responsible for its Endemism to Granite Outcrops of Georgia and Alabama, PhD. thesis, UNC at Chapel Hill Botany Dept.



*H. porteri* blooming in a shallow depression in the middle of a flatrock at Mitchell Mill

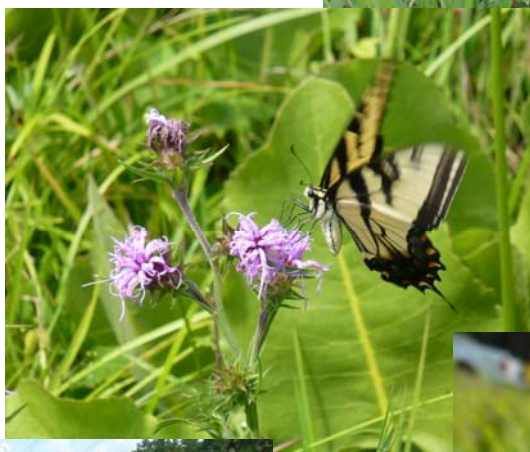
All photos by Herb Amyx.



massed bloom at Mitchell Mill flatrocks



## *Picture Creek Workday*



*Photos compliments of Nancy Adamson, volunteer*



## *More on Picture Creek*



*Easy to see the bee, but can you spot the spider in the photo on the right?*



*When the butterflies finish, the bees move in (see photo on previous page)*



*Enormous piles of brush were pulled out of Picture Creek on this workday, but there is always plenty of time for botanizing and photo taking! Thanks to all the volunteers, and to Nancy Adamson for these photos.*



## JOIN A PRESERVE TEAM

You may join as a team member by contacting the Steward:

Harvest Field: Kathy Schlosser [kathyschlosser@triad.rr.com](mailto:kathyschlosser@triad.rr.com)

Mineral Springs Barrens: Lisa Tompkins

[lestompkins@windstream.net](mailto:lestompkins@windstream.net)

Hog Branch Pond: Charlie Kidder [charleskidder@bellsouth.net](mailto:charleskidder@bellsouth.net)

Hebron Road: Herb Amyx [patamyx@yahoo.com](mailto:patamyx@yahoo.com)

Eastwood: Joan Schneier [joan.schneier@ncdenr.gov](mailto:joan.schneier@ncdenr.gov)

Pondberry Bay: Dale Batchelor & John Thomas

[dale@gardenerbynature.com](mailto:dale@gardenerbynature.com)

Tater Hill: Mark Rose [trilliumboy@yahoo.com](mailto:trilliumboy@yahoo.com)

Cedar Cliff: Jean Woods [jean14424@aol.com](mailto:jean14424@aol.com)

You may sign up as Steward or join a team by contacting Lesley Starke: [Lesley.Starke@ncagr.gov](mailto:Lesley.Starke@ncagr.gov)

Bat Fork Bog—Henderson Co.

Ochlawaha Bog – Henderson Co.

Paddy Mountain – Ashe Co.

Melrose Mountain – Polk Co

White Oak Mountain – Polk Co.

Dulany Bog – Jackson Co.

Eno River Diabase Sill – Durham Co.

Hebron Road – Durham Co.

Long Mountain Slopes/Poison Fork – Montgomery Co.

Denson's Creek – Montgomery Co

Pondberry Bay – Sampson Co.

Boiling Spring Lakes – Brunswick Co.

Hog Branch Ponds – Brunswick Co.

Big Pond Bay – Cumberland Co.



### Friends of Plant Conservation

*Conserving North Carolina's rare  
plants and unique places.*

Membership sends a signal that you believe conservation of native plants in their natural habitat is important.

Membership contributes directly to that mission and funds raised will support the acquisition and management of critical sites.

