



The Newsletter of the South Carolina Native Plant Society

Summer 2005

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Spring 2005 Symposium a Success

By Hart Scott and Charles Horn

This year's South Carolina Native Plant Society meeting was held at the Riverbanks Botanical Garden April 22-24, 2005. The symposium emphasized the interactions between plants, animals, and humans under the title of "The River in the City". Activities began Friday evening with an introduction by the symposium organizer, Bert Pittman. He emphasized the theme of the symposium, as it related to a meeting of the Broad and Saluda Rivers at downtown Columbia, and flowing eastward as the Congaree River.

Dr. Reed Noss, a professor at the University of Central Florida was the keynote speaker for Friday evening. Reed visualized a much longer time frame in biodiversity changes in his presentation entitled "Seeking the Big Picture: Thinking Big in Space, Time and Ambition." Through the history of our planet, there have been five major biological extinction events recorded. Might we be in the sixth right now? With an increase in the number of humans, there has been a loss, not just of species, but also of ecosystems. So, according to Dr. Noss, as we develop conservation plans, we need to consider both species level and ecosystem level plans. One example of needed conservation is for the longleaf pine ecosystem, which was once widespread throughout the southeast.

Saturday included a full day of presentations, workshops and field trips. In addition, several vendors were present to sell books, plants, and artwork. Barry Beasley, director of habitat protection for the South Carolina Department of Natural Resources began the morning by discussing the integral relationships between the rivers and our society. He explored the uses and threats to the Broad, Saluda, and Congaree Rivers. Today the most significant challenges facing the rivers are water quality, access for recreational use, aquatic health and oxygen levels, and riparian zone management.

Dr. John Nelson presentation was entitled "Paradise Lost (& Found)." He examined three major threats to biodiversity in the Midlands; they are habitat loss, urbanization and population growth, and invasion by alien species. Some examples of good ecosystem use in the Midlands include the black water streams of the North Edisto River, hardwood forests in the Congaree National Park, oxbow lakes, Carolina Bays, and the Piedmont glades. These areas are used in ways that protect biodiversity. Dr. Nelson expressed the need for more studies on biodiversity in the Midlands, and he emphasized the need to protect biodiversity in all communities.



View of main building at the Riverbanks Botanical Garden, site of the 2005 SCNPS symposium. Photo by Charles Horn, April 2005

"Phoenix Rising, The Rocky Shoals Spider Lily-A Survivor" was presented by Cindy Aulbach. She has studied four populations of Rocky Shoals Spider Lilies in South Carolina and Alabama. Deeper water proved to have plants with greater basal area than those in shallower water. Riverweed has proved to be helpful in seedling establishment. However, spider lily seeds and seedlings had a low survival rate of about 10%. Adverse factors included flooding, sedimentation, competition, herbivory, and drought. Cindy noted that there are no real long term efforts for monitoring spider lily populations. However, the spider lilies can thrive despite grievous conditions, as they have their own unique habitat within a river ecosystem.

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**ANNUAL BUSINESS MEETING HELD AT THE
SPRING SYMPOSIUM IN COLUMBIA**

John Brubaker, the SCNPS president, presided over the society business meeting on Saturday, April 23. He started by thanking the symposium organization committee, especially Bert Pittman, for putting together an exciting and informative meeting. The society is continuing to grow in membership and now has over 300 members and is in good financial standing. John reviewed the society's committees, which include grants, membership, public relations, newsletter, symposium planning, education, and website. Each is doing a good job at making the society stronger. The meeting was then turned over to Charlie Everett, the society Treasurer. Charlie presented a handout with information on the society finances.

John Brubaker continued with comments on advocacy issues. The society has received a grant to help pay for the restoration project at the Canby Dropwort Preserve in Bamberg County. This will be an important project over the next few years. The society also has concerns relative to invasive species, such as beach vitex. The society has been active in conversation with the National Forest relative to the management policies. The SCNPS Board members will continue to be updated as policies change. John concluded the meeting by informing members that individuals wishing to assist with research efforts within the Carolinas may wish to volunteer to be part of the SC PULSE project; this summer it will be in late May at the Santee Coastal Reserve.

SPECIAL THANK YOU TO SYMPOSIUM SUPPORTERS

The South Carolina Native Plant Society thanks the following for their generous financial support of the Spring 2005 symposium.
Nat & Jan Benson, Ann Amundsen, and Designworks, LC.

Upstate Chapter Summer Field Trips & Activities

July 19, 2005 - (Tuesday): 7:00 p.m. – Hayden Center at SC Botanical Gardens in Clemson. Speaker is L. L. Gaddy. His presentation is entitled "Mark Catesby: First European Artist/Naturalist in the Carolinas". Gaddy will present a power point show combining Catesby's prints with his own photographs.

August 6, 2005 – Field Trip: Blue Ridge Parkway. The Parkway ranges from elevations of 649 to 6,047 feet, with obvious changes in moisture, temperature, therefore, plant life. Patrick McMillan will be our field trip leader. Sign up with Seth Harrison: 864-233-2420

September 17, 2005 – Field Trip: Suther Prairie, Cabarrus County, NC. Leaders: Larry Barden/Bill Stringer. Meet at the parking lot of Home Depot on Woodruff Rd in Greenville to carpool. Depart at 7:30 am.

Staying in the loop – using the SCNPS listserv

For a diverse state-wide organization such as SCNPS, keeping the membership informed about issues, activities and news is vitally important. While much of this information is always available online at our website, www.scnps.org, there are times where this information needs to be disseminated in a timelier manner. For this reason, we have an e-mail group through Yahoo groups which is only open to SCNPS members. If you are not already a member of the email group, you can join by visiting <http://groups.yahoo.com/group/scnps/> and clicking on "join this group". By the same token, if you want to remove your name from the list you can easily unsubscribe at any time. Please feel free to contact Harry Davis directly with any questions or concerns at harry.davis@scnps.org

Harry Davis, SCNPS Webmaster – June 2005.

(symposium, continued from pg. 1)

Another species of interest within the Columbia area, and definitely associated with the rivers was the topic of a presentation by Charles Horn. His title: The May-white Azalea: How Could We have Overlooked this Species So Long?, represented five years of work. It is recognized by having white flowers with a yellow blotch that open in May and their distinctly strong, sweet odor. Currently, 23 populations are known in eleven South Carolina Counties. All but one of these is within the watersheds of the Saluda, Broad and Congaree Rivers. Plants have been found to grow above streams on generally north facing slopes with slightly acidic and well drained soils. Of especial interest is the distinct absence of introduced species, suggesting that May-white azaleas do best in relatively undisturbed sites. Charles concluded by asking members to keep their eyes and nose open for this beautiful species during their field trips.



The Congaree River at Columbia. Rocky Shoals Spider Lilies grow at this site. Photo by Barry Beasley.

Richard Figlar examined “The Genus *Magnolia* in South Carolina.” Magnolias favor deep, mesic soil, north facing slopes, and mountainous areas. They are pollinated by beetles and birds. Six species of *Magnolia* can be found in South Carolina. Interestingly, while magnolias are ancient species, they have changed very little. In fact, the modern *Magnolia grandiflora* is almost identical to fossils from 15 million years ago. Richard Figlar ended his speech by noting the three major species at risk. *Magnolia pyramidata* is ranked as a G4, *Magnolia macrophylla* is ranked as a G5, and *Magnolia acuminata* var. *subcordata* is also threatened.

After a delectable lunch, John Brubaker presided over the business meeting of the society. Please see page two for a summary of the business meeting.

Katherine Goodrich started the afternoon segment of the symposium with a presentation on “The Elusive Paw Paws.” Many are already familiar with the common paw paw, *Asimina triloba*, well known to floodplains of South Carolina. There is a relative also well known in South Carolina, the small flowered paw paw, or *Asimina parviflora*. Interestingly enough, there are several other species of paw paw; these are rare and known from Georgia and Florida. Katherine has spent time trying to determine the chemical nature of the nectar in flowers of paw paws with the question of what gives them their distinct odors. She has been able to isolate several chemicals. The white flowers have a sweet odor while the brown flowers have a yeast-like odor.

The last of the afternoon speakers was Cecil Frost, who is an expert on the historical foundations of landscape ecology. His presentation, “Fire History of Midland Plant Communities” concentrated on the need for periodic fires to maintain some of the plant communities known in South Carolina. Fire frequency near the coast in some communities is ideally in a 1-3 year cycle, while other communities and their plant species appear to thrive best with 4-6 year fire cycles. One interesting example is that of the Venus flytrap; it does best with annual fires.

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South Carolina Native Plant Society Application for membership

Name: _____

Address: _____

City, State, Zip: _____

E-mail: _____

Home Phone: _____

Work phone: _____

Membership Categories:

___ Student (\$15) ___ Individual (\$25)

___ Joint (\$35) ___ Corporate (\$75)

___ New member ___ Renewal ___ Gift membership
(if gift, include message to put on card)

Donation _____ Total Enclosed _____

Chapter Affiliation:

___ Upstate ___ Piedmont ___ Midlands ___ Low country

Mail to:

SCNPS, PO Box 21266, Charleston, SC 29413

(Symposium summary, continued from pg. 3)

The remainder of the afternoon allowed for symposium participants to be involved in either workshops at the botanical garden or in local field trips. Workshops covered native plantings in the garden, a review of exotic plants, methods of plant propagation, use of natural dyes, and art in nature. Local field trips were to Saluda Mills, Congaree Creek, Fort Jackson, Harbison State Forest and the Columbia Riverwalk Park.

After dinner at the gardens, members settled into a presentation by Stephen Buchmann on "Pollinators Remembered: Global Threats to Pollinators and their Plants." Dr. Buchmann reminded us through a series of examples that plants and animals are closely tied together through pollination. Animals get food, and plants are allowed to complete their reproduction so as to generate seeds.

Sunday morning allowed for a series of field trips to sites beyond Columbia. I (Charles Horn) led a well-attended trip to Lynch's Woods in Newberry County. We were able to see a wide variety of spring flowers along the trails and roadsides within piedmont communities ranging from powerline fields to pine woodlands to mature beech-maple forests. Of especial excitement were Catseby's Trillium, Solomon's seal, false Solomon's seal, melic grass, the May-white azalea (although only in bud), storax, and wild alum. In all, Lynch's Woods provides an opportunity for a hiker to see over 500 species of plants during the year within the 280-acre park.

Additional Sunday field trips included travel to Peachtree Rock to see sandstone cliffs and longleaf pine forest of the sandhills; Congaree national park to experience a swamp forest with some of the largest loblolly pines; Forty Acre Rock to visit the large granite outcrop and vernal pools; and Congaree River Bluffs Heritage Preserve to see the hardwood ravines that overlook the river.

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Canby's Preserve Management Plan Underway

Dr. Jeff Glitzenstein secured a matching grant from the US Fish and Wildlife Service for the restoration of Canby's Preserve, a property owned by the South Carolina Native Plant Society. This relict Bay along US highway 301 south of the Little Salkehatchie River is most well known for its large population of Canby's Dropwort (*Oxypolis canbyi*). While under private ownership the adjacent upland area was turned into a loblolly pine plantation.

Our restoration will require a cut of the loblolly pines on a large portion of the property. The cleared land will be planted in Longleaf Pine along with grasses and herbs appropriate for the site. The cutting will commence as soon as the soil is dry enough to allow the harvest without damage to the soil.

More on this significant project in the Fall issue of the newsletter.