

# Edwin M. Griffin Nature Preserve Management Plan

## *DIRECTIONS AND LOCATION*

Sydnor Drive Entrance:

211 Sydnor Road, Spartanburg, SC 29302

Directions to the Cottonwood Trail from Columbia: Drive up I-26 west to Spartanburg. Take Business I-85 north. Take the 585 and 176 East exit (Pine Street) exit. Go 3.5 miles on Pine Street in to the city. Turn left at Converse College (Chamber of Commerce building is on the right) and continue on this street as it joins East Main Street (stay left). Go 1.5 miles on East Main St. Turn right onto Fernwood Drive. (there is an Eckerd's Drug Store there) Turn right just past Fernwood Baptist Church onto Dupre Drive. You will see Spartanburg High School on right. Go to stop sign and turn right. Pass the tennis courts on your right. You will see a baseball field on the right. Turn into a parking area just past home plate.

Beechwood Drive entrance:

403 Beechwood Drive, Spartanburg, SC 29302

From East Main Street turn right onto Fernwood Drive (there is a Rite Aid Drug Store there). Pass the Fresh Market on your left, continue on straight. Pass Westminster Presbyterian Church on your left. Pass several streets and start looking for Beechwood Drive on your left. Turn left onto Beechwood. Go to the bottom of the hill and turn right into the gravel parking area. You will see a green sign for the Cottonwood Trail Preserve.

Woodburn Road entrance:

1083 Woodburn Road, Spartanburg, SC 29302

From East Main Street, turn onto Fernwood Drive. There is a Rite- Aid Drug Store there. Pass the Fresh Market on your left, continue on straight. Pass Westminster Presbyterian Church on your left. Continue on. Pass several streets, cross over Lawson's Fork. Continue on until you get to the traffic light. Turn left. Pass several houses and then look for our parking area under the power lines on your left.

## *GENERAL DESCRIPTION*

This urban greenspace is a 118 acre nature preserve with 5 miles of trails. The property consists of mostly floodplain, wetlands, a pine forest, hardwoods consisting mostly of tulip poplars, oaks, river birches, hackberry, and notable cottonwoods (thus, our name.) Part of the preserve runs along Lawson's Fork Creek in the city limits of Spartanburg - mostly floodplain land, but some uplands as well. Trails are all named and mapped on wonderful large maps at 3 trailheads. The preserve has many unique and outstanding features including several wetlands, open spaces, geological formations, and offers habitats for deer, wild turkey, fox, beaver, raccoon, numerous birds and reptiles, wildflowers, and trees.

SPACE hosts an annual 5 K race called the SPACE Jingle Bell Race and also an annual "boot camp" type race.

Many Boy Scouts have achieved their Eagle Scout awards by completing projects on the preserve, such as footbridges, bird and duck houses, benches, etc.

As of the summer of 2008, we have over 5 miles of trails and a new Frisbee golf course and the preserve continues to be a favorite place for hikers, runners, nature viewers and more.

There are three main trailheads: across the street from the athletic fields at Spartanburg High School next to the Fernwood Pool, at the intersection of Beechwood Drive and Fernwood Drive, and Woodburn Road under the Duke Energy lines.

## *BRIEF HISTORY*

The original tract of land which would become the Cottonwood Trail was 85 acres, and was purchased in March of 1990. There was a dedication April 20, 1990 with Rudy Mancke as special guest.

In May of 2004, a 425-foot boardwalk and observation deck was built on the Cottonwood Trail in a wetlands area. Funding for this large project came from the Mary Black Foundation, Dr. Clancy Ballenger, and SC Forestry Commission.

In 2006 SPACE was awarded a SC Conservation Bank award to purchase an additional 29 acres from Dr. Calvert McCorkle. The land that was purchased was slated for development with a possible 6 house sites. Now this land is protected and available for all of Spartanburg to enjoy. To celebrate, SPACE hosted a "Cottonwood Carnival".

Also in 2006 a new book by the Hub City Writer's Project's was published, *The Cottonwood Trail . . . Glimpses of Wildness in the Heart of Spartanburg* by Thomas Webster.

We extended the boardwalk and created a new trail, the Highlands Trail in 2007.

In 2007, almost three more acres were added. Ed Griffin, Ed Miller, and Don Miller donated the land to give us ownership all the way to Woodburn Road under the Duke Energy lines. We added a new parking area and trailhead there.

## ***RELATED ORGANIZATIONS/GROUPS OF INTEREST:***

- 🍏 Kudzu Coalition
- 🍏 Duke Energy
- 🍏 Spartanburg Running Club
- 🍏 Fernwood Pool
- 🍏 SC Native Plants Society
- 🍏 Spartanburg Science Center
- 🍏 Master Gardeners
- 🍏 College and university faculty
- 🍏 Spartanburg High School
- 🍏 Audubon Society
- 🍏 Boy Scouts
- 🍏 Girl Scouts
- 🍏 Spartanburg County schools
- 🍏 Daycare centers
- 🍏 Hub-Bub artists
- 🍏 Frisbee golf enthusiasts

## ***CONSERVATION/ECOLOGICAL IMPORTANCE***

### ***Species of interest***

Silverbell (Halesia), Green Dragon, Jack in the Pulpit, pawpaw, bloodroot, mayapple, sweet shrub

### ***The 10-acre wetland***

The wetland is beaver-generated and maintained, merits special consideration in terms of its biotic diversity. There are bald cypress, extensive bur-reed and buttonbush flats with cattails and pickerel weed. There is a pond weed that provides nursery habitat for a variety of minnows. The wetland provides a refueling station for upland shorebirds like spotted sandpiper. Great Egrets and Great Blue Herons and Green Herons are seen often. There are wood ducks and mallards. Several species of amphibians breed and lay eggs in the wetland. All of the southeastern woodpeckers are present except the red-cockaded and the ivory-billed. The large assortment of dead trees provides an ideal habitat for these birds. The wetland serves as a ten-acre bio-filter for water draining from city streets and mall parking lots to the north.

### ***Geology/Topography/soils***

There are two diabase dikes that cross the river; in both instances turning the river 90 degrees. There are two prominent metamorphic ridges parallel to each other, a garnet schist, and a mica schist ridge. They both support hardwoods. The primary floodplain is the Congaree series. The uplands of Cecil-Applying eroded clay soil are either pine dominated or mixed hardwoods. \*\* See attached report by Dr. Lyle Campbell for more.

### *Wofford College Invasive Species Research*

In the fall of 2004 under the leadership of Dr. Douglas Rayner, Wofford College began a long-term research/monitoring program in Spartanburg, South Carolina. Privet (*Ligustrum* sp.) has been identified as one of the greatest threats to riparian habitats in South Carolina. Working in the Cottonwood preserve, twelve ten- by- ten meter plots were selected in a levee forest with heavy or sparse infestation of privet. In December of 2004 eight of these plots were experimentally removed of all invasive species. Data on diversity of flowering plants, diversity of soil arthropods, and various parameters relating to soil chemistry were obtained in December 2004, before the removal of the invasive species and will be obtained again in the spring of 2005 and in ensuing spring and fall for at least 10 years. Combined with surveys of the entire preserve these plots will provide a baseline of information and allow for more in-depth studies. An equally important part of our project is educating the general public about the harmful effects of invasive species on natural communities. By reaching out to the community and including them in the process of setting up and monitoring research plots we hope to raise awareness and begin to lay the foundation for supporting the fight against invasive species. By using local media and working with like-minded non-governmental organizations (NGOs) we have amplified the message to a much larger audience. We hope that the coalition established between Wofford College and the Spartanburg community will be a model of how to address the problem of invasive species on the local level.

Brian Green began the research and has since gone on to Cornell University for graduate work and has presented a paper on his work on the Cottonwood Trail in Atlanta.

Wofford College, Converse College, USC-Upstate, and Spartanburg Methodist Colleges all take various classes on the preserve.

## ***MANAGEMENT PLAN***

An Advisory Team oversees the management of the preserve. This team will be chaired by a SPACE Board member and at least two board members should be on this team, along with others from the community who are familiar with the preserve. Ideally, athletes as well as naturalists and scientists should serve.

*For clarity in management, we have divided the preserve into sections:*

- Section 1 Loblolly – closest to SHS and the Fernwood Pool
- Section 2 Pinecone - section from Fernwood Drive to Duke Energy bridge
- Section 3 Wetlands
- Section 4 Ridge – section from Duke Energy bridge to the end of the property at Forest Oaks
- Section 5 Powerline – all that land on Ed Griffin's side of the river
- Section 6 Highlands – above the wetlands on the McCorkle land – the Highlands Trail

## ***TRAILS***

- Cottonwood Trail
- Loblolly Trail
- Pinecone Trail

- Wetlands Trail
- Highlands Trail
- Powerline Trail
- Beaverdam Trail
- Ridge Trail
- Shortcut Trail
- Turkeycut Trail

## ***1<sup>ST</sup> YEAR MANAGEMENT:***

- ✓ Establish tax status with state and county
- ✓ Secure property insurance
- ✓ Develop basic map showing features and structures
- ✓ Locate and mark boundaries
- ✓ Survey the property for needed signage – trails, trail heads, parking lots, etc.
- ✓ Identify and contact neighbors and other stakeholders
- ✓ Study the needs of local groups wanting to use the property
  - Boy and Girl Scouts
  - Local colleges and high schools
  - Watershed Ecology Center
  - Runners
  - Birdwatchers and other nature users
  - Families
- ✓ What structures will need to be built?
  - Footbridges
  - Handrails
  - Benches
  - Picnic tables
  - Kiosks
  - Steps
  - Educational signs
  - other
- ✓ Locate possible trail sites
- ✓ Locate potential gardening spaces
- ✓ Publicize your site, make it known to the people in the area
- ✓ Have a dedication of the property

## ***ONGOING JOBS:***

- ✓ Continue insurance coverage
- ✓ Improvements to maps
- ✓ Identify invasive species and begin removal
- ✓ Do we want our own logo for the preserve? Incorporate that into signage
- ✓ Order signage and install
- ✓ Build needed structures
- ✓ Recruit Boy Scouts and other volunteers to help

- the fields, trails, under the power lines need to be mowed as needed
- clean up, cut up fallen trees
- replace signs as needed
- attention to eroded areas on an “as needed” basis
- bridges need to be checked twice yearly for safety
- bush-hogging as needed, to keep trails wide and safe
- check the parking lots for safety and adequacy
- trash cans OK?
- manage invasive species (kudzu, privet, English ivy, multiflora rose,
- wash the signs – clean from pollen and weather
- litter pick up
- overseeing of new trails and restoring old trails
- conducting tours
- collecting data
- recommending new strategies of management
- the chairman of the Advisory Team shall report the status of the preserve to the board of trustees on a monthly basis and shall be recorded
- Continue to remove invasive species
- Replant with native species
- Check for pine beetles in late April and every month through October

## *SIGNS*

- 🍏 Trailhead signs
- 🍏 Botanical signs/tree labels
- 🍏 Educational signs (e.g. along the wetlands, invasive plants, erosion, streambank restoration, loblolly thinning, forest management)
- 🍏 Directional/trail name signs
- 🍏 Memorial
- 🍏 Parking

## *FENCES/GATES*

## *BRIDGES*

- Duke Energy Bridge – Power line section 5
- Sam’s Bridge – Loblolly section 1
- Andy’s Bridge - Pinecone section 2
- Brook’s Bridge – Power line section 5
- Taylor’s Bridge – Power line section 5
- Cambo’s Bridges – on the Turkey Cut Trail in powerline section 5

## *BOARDWALKS/OBSERVATION PLATFORMS/ BENCHES*

- Wetland boardwalks
- Paul’s Place
- Benches

## ***HUMAN IMPACT***

SPACE will try to respond effectively to the impact of humans on the property such as:

- Dumping
- Litter
- Vehicular Traffic
- Hunting
- berry picking
- picking of flowers
- pets, pet waste, and pet behavior problems

## ***EXOTIC/INVASIVE SPECIES CONTROL***

SPACE shall make every effort to identify and remove all invasive and exotic species of plants. These plants include:

- Chinese Privet
- Kudzu
- English Ivy
- Multiflora rose
- Eleagnus
- Japanese honeysuckle
- Japanese stiltgrass

It is our goal to replace these exotic plants with native plants in restoring the land.

Re-introduction of native species – e.g. ferns from the Chinquapin property

## ***ISSUES:***

- Funding
- Security
- Signage - Specifications for signs – materials, uniformity with design and materials
- Invasive plants
- Pesticide guidelines
- Flooding
- Erosion
- Coordination of volunteer projects
- Pine beetles

## ***PROJECTS / WISH LIST:***

Top Ten, in order

- Extend Trail
- Endowment
- Native plants
- Improve bridge life with better materials
- Finish small Wetlands Boardwalk
- Clear out river
- Education at the elementary level
- Restore stream bank
- Budget for work crews

- Remove privet/kudzu

## ***BUDGET NEEDS***

- Labor
- Signs
- Tools
- Equipment
- Insurance
- Flyers/membership information
- Kiosks
- Mailboxes for printed materials

## ***ATTACHMENTS:***

- Boy Scout Projects
- geology report by Dr. Lyle Campbell
- Birds report
- Fauna report
- plants report by Dr. Gillian Newberry

## ***BOY SCOUTS AND THE COTTONWOOD TRAIL***

SPACE is proud to have the wonderful projects local Boy Scouts provide on our preserve:

1. Andy McKee	footbridge	October 1992
2. Johnny Campbell	steps on hill	October 1992
3. Kris Neely	30 bird houses	December 1992
4. Ben Ratterree	bat boxes	December 1992
5. Brian Poole	2 kiosks	December 1992
6. Luke Roberts	steps on sandy beach	January 1993
7. David Stallings	3 benches, 3 owl boxes	May 1993
8. Joey Carter	2 picnic tables	May 1993
9. Neil Irwin	tree identification/labels	May 1993
10. Paul Lee	6 benches	September 1993
11. Brooks Crenshaw	footbridge near Duke Power Bridge	October 1993
12. Jay Reagan	footbridge near Fernwood Dr.	February 1994
13. Warren Clayton	2 picnic tables	February 1994
14. Will Bean	blazed new trail	April 1994
15. Asher Hurst	bat boxes	summer 1996
16. Will Richter	trash receptacles	1998
17. Cambo Cecil	footbridge near Ed's	January 2002
18. Hall Todd	2 kiosks, 1 at CT and 1 at GS	February 2002
19. Andy Parry	footbridge near Ed's	May 2002
20. Derrick Miller	benches	March 2004
21. Craig Calhoun	bird boxes	March 2006
22. Harrison Cecil	bat boxes	May 2006
23. Robbie Pendleton	chimney swift tower	March 2006
24. Josh Graham	wood duck boxes	January 2007
25. Ben Rush	kiosk for wetlands preserve	January 2007
26. Taylor France	footbridge	February 2007
27. Matthew Roberts	kiosk at Woodburn Rd.	August 2007
28. Cobb Howell	Frisbee golf course	August 2007
29. Ballenger Harris	2 picnic tables and trail work	Fall 2007
30. Steven Axelrod	picnic tables	March 2008
31. Jacob Strehl	split rail fence along Woodburn Rd.	June 2008
32. Caleb Fort	landscaping along fence	June 2008
33. Arthur Hellyer	duck boxes	June 2008
34. Angelo Thallasenos	privet removal and fern plant	fall 2008
35. Drew Henderson	1 bench and clean up area	fall 2008
36. Tanner Oldham	4 benches	spring 2009
37. Wilson Purinton	bat boxes	winter 2009
38. John Blackman	new ramps for DP Bridge	Aug. 2009
39. Conner LeRoy	animal proof trash receptacle	April 2010