



RECONCILING
THE NATURAL
WORLD &
HUMAN CHOICES:

Ten Sites for Reflection

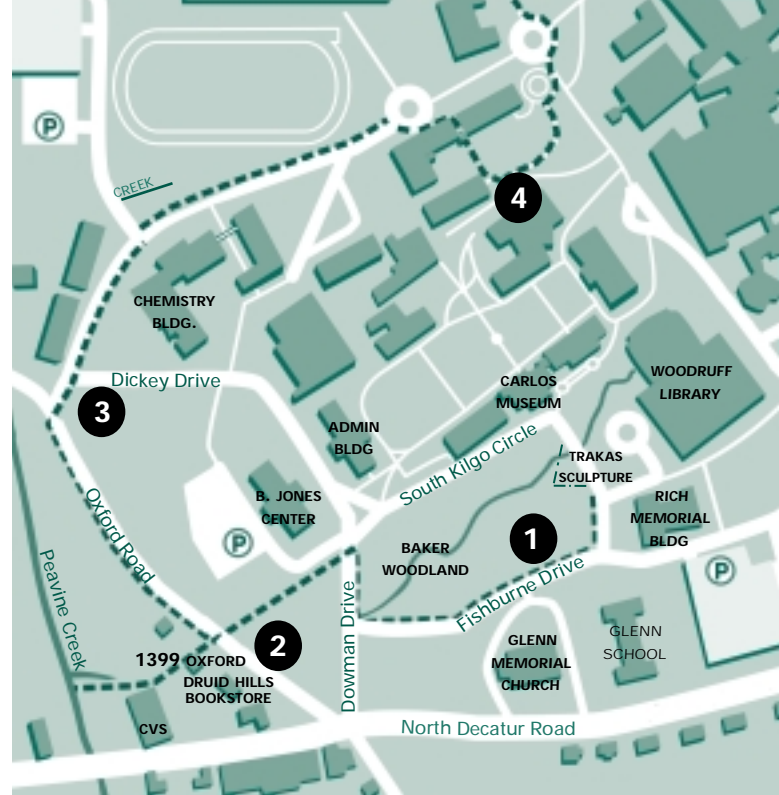
An early view of Candler Library shows a treeless Quadrangle; today's view on the right.

This **place**, the Emory University campus, is work site and home for students, faculty, employees, and neighbors. Prior to

urban development, it was a richly diverse landscape of farmland and forest. In this millennial year, as the Atlanta region awakens to the damaging effects of rapid growth on our quality of life, we embrace the challenge of incorporating environmental awareness into our daily lives. Through this walk, you may explore some remnants of the forested natural community. In the tour, you will see ways we seek to reconcile our urban way of life and academic mission with the challenge of preserving and restoring that community. Join with us as we learn new dimensions of Emory's landscape and history. Help us to preserve for future generations what we have inherited from the past. Enjoy your walk!

You may begin your walking tour at any site, but the first marker is located behind the Carlos Museum (near the intersection of Fishburne Drive and Mizell Drive) in the area between the Rich Building and Glenn Memorial Church.

The complete tour takes about two hours, but if you wish, you can visit sites numbered 1-4 in one on-campus loop, and make sites 5-9 into a second loop along Clifton Road. There are places to eat between the two loops, if you want to take a break.



1
BAKER
WOODLAND

Named for the late Woolford B. Baker, beloved professor of biology and protector of Emory's natural resources,

Baker Woodland is a wonderful example of a Piedmont hardwood forest. It contains over 100 plant species including 60 native trees, shrubs, and woody vines. This forest of oak, tulip poplar, beech, and hickory has lost delicate understory wildflowers to invasive foreign species (especially English ivy and privet). Control of these plants has begun through the combined efforts of the Ad Hoc Committee on Environmental Stewardship and Friends of Emory Forest. Restoration of native plants has also begun, and future plans include a walking trail, a bridge across the creek, and improvements to drainage. Baker Woodland illustrates an important opportunity for both conservation and restoration.

During and after storms, the volume of water that moves through the area is a threat to Baker Woodland. This (nameless) creek serves a large watershed that reaches into Druid Hills and across Clifton Road. New buildings on

campus and off (such as the Woodruff Library Extension and the parking deck across Clifton Road serving the Emory Hospital and Clinic) have interrupted percolation of water into the ground, and runoff has increased. Following a storm, water backs up at the downstream end of the woods because of an undersized drainage pipe under Dowman Drive. Installation of a larger pipe would likely result in a more damaging surge of water downstream into Peavine Creek and the area behind the Druid Hills Bookstore. The forest upstream from Dowman Drive has been designated a “detention pond,” but despite the periodic flooding, trees are still growing in the “pond area.” After removal of privet, tolerant trees such as bald cypress can be planted.

Feel free to use the George Trakas environmental sculpture pathway (to the right of the picnic tables) to walk down to the creek. Note any wildlife tracks and streambank erosion damage. Be careful where you walk in Baker Woodland—don't step on the wildflowers!

Next, walk west down Fishburne Drive toward the entrance of campus. Take a right on Dowman Drive and walk uphill to the entrance to “Visitor Parking” on the left, just before you come to the B. Jones Center. Just after the parking gate arm, follow the path on the left through the woods to Oxford Road. Note that the Baker Woodland stream emerges here from under Dowman Drive.

2

PEAVINE CREEK

Before you cross Oxford Road, pause to look at this disturbed wooded area. Kudzu has been removed here, and a future streambank

restoration project is planned to stabilize the area.

Now walk behind 1399 Oxford Road (Hughes Science Initiative). Please cross Oxford Road carefully. Notice the condition of the Baker Woodland creek as it emerges from under

Oxford Road. Continue walking to the rear of the CVS parking lot to see the Baker Woodland creek enter Peavine Creek.

Much of the western border of the Emory campus is Peavine Creek. Note how high on the creek sides you can see trash deposited by storm surges. Such torrents also destroy habitat for the small in-stream insects that support a healthy ecosystem. Erosion along the streambank causes property loss—Emory and our neighbors have lost three to six feet in various locations as the creek has widened. Eroded banks cause trees to fall, further damaging the protective buffer.

In the past, building practices disregarded the need for buffer vegetation, often paving right up to the creek, as we see here. Today, state law requires a 25-foot riparian buffer zone of natural vegetation along creekbanks. The tumbled rocks (rip rap) that hold the bank by the CVS parking lot are less desirable than a healthy forested buffer, because they do not allow habitat for the organisms that help clean the water and maintain a healthy creek ecosystem. Planted buffers also help strain out pollutants such as automobile oil carried in rainwater runoff from parking lots, a major cause of poor streamwater quality in the Metro area. Rainwater passing over hot pavement in summer also brings sharp changes to stream temperature, another reason to favor riparian buffers.

Emory is collaborating with the Peavine Watershed Alliance to restore this area to become Peavine Park. A small mountain of kudzu and trash was removed in past cleanups. Future plans involve replanting and streambank stabilization. Future reconciliation dilemmas: can this trash-filled “backyard” become a clean and peaceful walking trail uniting commercial areas and the creek for recreation and personal renewal?

Return as you came to Oxford Road and follow the sidewalk to your left, to the next site near the campus iron gates (where Pierce Drive meets Oxford Road).



3
**SITE OF NEW
 SCIENCE
 BUILDING**

The intersection of Pierce Drive and Oxford Road, looking east (August 2000)

The new home of Physics, Environmental Studies, and Mathematics and

Computer Sciences, this building will reflect several important trends in environmental reconciliation. It is the first site on campus in which an area of forest sacrificed to building is being replaced with a new, comparable area of forest added to the campus. This site also marks long hours of discussion and debate, invested by faculty and staff, to find ways of improving the balance between campus growth and environmental health.

Designing the building for efficient use of energy, water savings, and other innovations, the planners and architects aim to earn approval from the Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system. This building and the Whitehead Research Building (stop #5) are the first Emory projects to join this program.

Take a right on Pierce Drive and walk uphill into campus. Notice the small bit of creek still visible on the left, just beyond the intersection with Fraternity Row. Continue uphill past the track to the first traffic circle, then go right up the stairs between Tarbutton Hall and the Geosciences Building. You are now on the Tull Energy Plaza. Walk ahead to the far end of the bridge over the ravine.

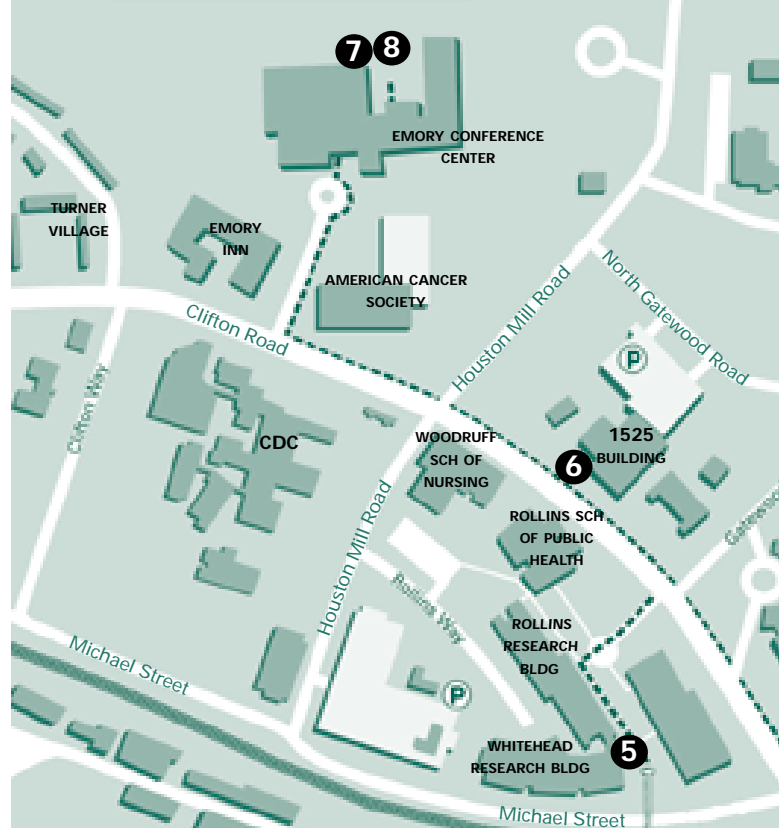
4
**CALLAWAY
 BRIDGE
 RAVINE**

Emory's second major wooded ravine can be seen behind the Theology and Physics buildings in this 1920s photo. On the far side of the ravine are Dobbs and Alabama halls. The Anatomy building can be seen in the upper right-hand corner and the Law School (now Carlos Hall) in the lower right, across the Quadrangle.

This small wooded area is all that remains of the deep, forested ravine bordering the original campus. Henry Hornbostel, Emory's first campus designer, sought to integrate campus buildings with the natural world by building a bridge over the ravine (the bridge over the other major ravine also remains, at Baker Woodland). A home to ten species of wild azaleas, this ravine was largely lost in the construction of the energy plant underneath Tull Plaza, which provides cooling for over 30 campus buildings. This is the origin of the creek you saw briefly below the gym and track. Recently, new pipes have been placed in this ravine, leading to further tree death. This site is a good example of the environmental trade-off necessary to provide water, heating, and air conditioning to campus buildings. Campus staff members were able to save some of the native azaleas, moving them to Baker Woodland, but the area still struggles with ivy control. Plans for the site include elimination of English ivy and the reintroduction of native plants.

At this point, you have some choices. If it's time for some refreshment, Cox Hall food court is straight ahead, snacks are available in the Dobbs University Center (to the left), and the Hospital Cafeteria is nearby to the right. The coffee shop in the old train depot is just over the hill by the railroad tracks on Asbury Circle. If you wish to break the walking tour into two separate loops, you may return to Baker Woodland to complete the first loop by walking through the central Quad (see map).

If you wish to continue to site #5, walk back across the bridge and then right (north), past the ravine with the Geosciences Building on your left, toward the Dobbs University Center on Asbury Circle. Continue on Asbury, keeping the front of the DUC on your right, and go uphill past the old train depot. On the right-hand side of the street here go up the staircase and across the pedestrian bridge above.



5 WHITEHEAD
RESEARCH
BUILDING

This building represents a turning point in environmentally sensitive construction at Emory. A heat recovery system on the roof added \$500,000

to the cost of the building, but in energy savings alone, it will pay for itself in three years. Stormwater will be stored in a cistern for reuse as irrigation water, and air conditioning condensate will be piped to nearby cooling towers, saving an estimated 2.5 million gallons of water a year. The 325,000 square feet of research space will contribute to Emory's stature as an institution of medical research, and the clustering of Whitehead close to other buildings creates an architecturally dense use of space, without loss of forest. This building also seeks LEED (Leadership in Energy and Environmental Design) certification.

Follow the sidewalk up the main stairs and take a right through the small parking lot to Clifton Road. Cross at the light toward the Woodruff Residential Center and take a left.



As you walk northwest on Clifton Road, note the new Nursing School across the street, built on a previously wooded site.

6

1525
BUILDING

Previously the location of the Seretean Center for Health Promotion, this building illustrates how Emory's University

Senate has helped to guide campus growth toward environmentally sound planning. Originally designed to be nestled inside a forested area—a plan which would have changed local water flows and reduced tree cover—the Center (now gone) was gathered into the design of this building after the Senate Committee on the Environment (COE) highlighted the benefits of preserving forest cover and locating the Center closer to parking and pedestrian access. Long-term consensus-building has been a valuable role of the COE. Emory's multi-stranded consultation process prior to campus construction has been recognized nationally as a way to safeguard environmental concerns in decision-making processes.

Walk up the right-hand stairway and follow the disability ramp around to the right until you reach the back of the building, below the parking deck.

Can you see the loading dock for medical waste from the Emory Clinic units here? Emory's medical waste is shipped to Alabama for incineration. Burning of plastics releases toxic dioxins into the air. Other alternatives for disposal of dangerous medical waste also have environmental costs. How can we move toward a safe, but less harmful management of medical waste? How can we reduce our total waste stream?

Retrace your steps, returning to Clifton Road.

Clifton Road marks the divide between the two watersheds Emory straddles: Peavine Creek on the west and south and Candler Lake on the east and north. Both the Candler

Lake and Peavine Creek watersheds drain into the South Fork of Peachtree Creek, which runs behind the Veterans Administration Hospital, the Emory Conference Center Hotel, and Sage Hill Shopping Center.

Continue on Clifton Road and enter the driveway for the Emory Conference Center Hotel. Walk into the lobby, down the main staircase, and outside to the gardens. Look over the back wall to view the relationship of the building to the surrounding forest.

7

EMORY
CONFERENCE
CENTER

An architectural delight, this building is also a model of reconciliation. Reflecting a heightened sensitivity to preserving the surrounding valuable hardwood forest, the

building's site and contour were the result of long negotiations among concerned Emory faculty, administrators, and neighbors. Over a decade after construction, large trees around the building are still alive, and most of the runoff has been handled without damage to the creek. Water flow issues remain, however, as newer buildings nearby have increased runoff. The resulting erosion in several spots highlights that environmental concerns do not end when construction is complete; designs must adapt as watershed pressures increase.

Look over the wall; can you see any gullies from runoff from this garden terrace? How does this area compare with the water flow area around Dowman Drive and CVS?

8

WESLEY
WOODS
FOREST

Wesley Woods Forest is one of the "best preserved hardwood forests in the entire Piedmont Province of the Southeastern United States," said Chancellor

Billy E. Frye in 1994. It is "an infinitely precious aesthetic and scientific resource which we now hold in trust for present and future genera-

tions." It contains a very high diversity of plants, including rare plant species, and it forms an integral part of the band of woods along the fork of Peachtree Creek that extends from the Wesley Woods retirement complex, behind the Emory Conference Center, east to Hahn Woods, and across Houston Mill Road. This ecological pathway facilitates the movement of plants and wildlife and protects the streambank.

In 1989, President James T. Laney proposed that this forest be preserved because of its intrinsic and educational value. The Board of Trustees pledged in 1999 that the University would take all practical measures to preserve this and other Emory forests designated as "near-pristine" in the Murdy/Carter Report on the Status of Forested Land of Emory University (1986).

Once referred to as "idle land," forests are now recognized as crucial to improving Atlanta's poor air quality. Through their removal of carbon dioxide from the atmosphere, they may also help offset global climate change by reducing greenhouse gases. They also help offset Atlanta's "heat island" effect.

Hahn Woods borders Wesley Woods forest to the south. Originally, it was the site of Emory's construction material dump, which covered a pasture and swimming pool belonging to the former estate owners. A project funded (and still maintained) by Georgia Pacific has beautified the site by creating a forested area using native plants. Scenic trails follow Peachtree Creek and include the remnants of the sluiceway from the old Houston Mill. When comparing Hahn Woods with the adjacent natural forests, one is struck by how difficult it is to recreate a forest once it has been lost.

Retrace your steps to Clifton Road and walk south on Clifton Road. If you have time, you may want to take a detour to visit Hahn Woods by turning left on Houston Mill Road and left again when you reach Hahn Woods. At the grey stone entrance gates on Clifton Road, turn into Lullwater. This stop on your

tour can be brief or lengthy, as you wish. Walk down the paved road and stay right as the road forks. Follow the gravel path off to the right, as it takes you to the new Shuttle Road and bridge.



9 LULLWATER

Cows graze in this early picture of Lullwater. The meadow (now overgrown) lies between Peachtree Creek and Candler Lake, and a jogging trail passes where the two people are standing. Erosion has lowered the streambed today to several feet below the bank.

Spiritual heart of the campus, these woods, meadows, and lake are open to guests of Emory and form a site of restorative recreation. The Lullwater Taskforce created by President William M. Chace unites faculty, staff, and students to serve as institutional advocates and protectors of the 130-plus acre park. Lullwater gives us a chance to consider other kinds of reconciliation on campus. As silt washes into the it, the lake may slowly become a wetland. Should we dredge it? If so, how should we dispose of the dredged silt? The lake was created (or perhaps only deepened) by a dam built by Walter Candler, after this land was taken out of agriculture. Should we remove the dam? Should we use the lake water for irrigation? Should efforts be made to control the numbers of Canada geese for whom the lake is a breeding ground?



10 STARVINE WAY (UNIVERSITY SHUTTLE ROAD)

Highly controversial on campus, the decision to build this shuttle road through the edge of Lullwater's woods reveals the tensions between the major new growth in buildings, employees, and parking

needs on the central campus and the desire to preserve woodlands for recreation, air quality, water quality, teaching purposes, and intrinsic value. The new campus entrance off Clairmont Road, with its adjoining parking deck, is designed to avoid additional congestion in the Clifton Corridor. The slowness of Metro Atlanta to respond to urban congestion with mass transit alternatives shaped this decision to shuttle students, hospital visitors, and campus employees to the main campus from the distant deck. The road and nearby buildings present water runoff challenges to the ponds and natural areas of Lullwater.

Starvine Way (named for a rare flowering plant species that grows in Emory forests) illustrates the interconnectedness of urban growth. Decisions to expand in one part of the campus (and the city) have substantial impacts on adjoining neighborhoods and watersheds. How do we reconcile our conflicting desires for academic expansion and quality of life? How do we restore Atlanta's streams to swimmable and fishable quality, as mandated by law? How can we restore our air quality as well? How can we minimize waste? Minimize energy use? Reduce our dependence on the automobile? Enrich our quality of life?

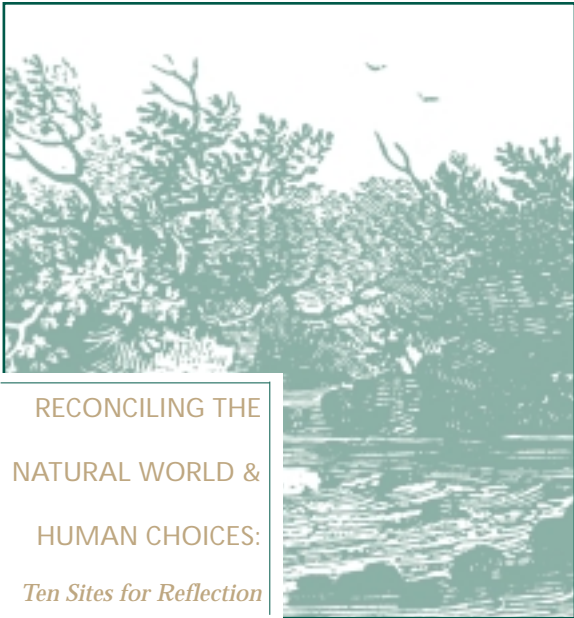
To return to Clifton Road and complete the second loop of this tour, walk across the bridge (over the railroad tracks) and turn right, through the parking lot behind Turman Residential Center. Keep to your right, and Andrews Circle will take you to Haygood Drive. Go right, and at the traffic light you will be, once again, on Clifton Road.

We hope this walking tour enhances our ability to use this campus **place** as an opportunity to learn about environmental reconciliation in ways that we can take with us, as we move on to other work sites and other homes, wherever they may be.

The Reconciliation Year walking tour committee: Peggy Barlett, Tim Bryson, William Buzbee, Eloise Carter, JoAn Chace, Howard Frumkin, James Johnson, William Murdy, John Wegner.

For further information on environmental groups and activities at Emory and to obtain an electronic copy of this brochure visit our website:

www.environment.emory.edu



RECONCILING THE
NATURAL WORLD &
HUMAN CHOICES:
Ten Sites for Reflection

- 1 Baker Woodland
- 2 Peavine Creek
- 3 Site of New Science Building
- 4 Callaway Bridge
- 5 Whitehead Research Building
- 6 1525 Building
- 7 Emory Conference Center
- 8 Wesley Woods Forest
- 9 Lullwater
- 10 Starvine Way



7 8

EMORY CONFERENCE CENTER

AMERICAN CANCER SOCIETY

CENTERS FOR DISEASE CONTROL

SCHOOL OF NURSING

1525 BUILDING

WOODRUFF RESIDENTIAL CENTER

WHITEHEAD RESEARCH BUILDING

5

9

10 STARVINE WAY

TURMAN RESIDENTIAL CENTER

EGLESTON CHILDREN'S HOSPITAL

DOBBS UNIVERSITY CENTER

WOODRUFF P.E. CENTER

EMORY HOSPITAL

EMORY CLINIC

GEOSCIENCES BUILDING

TARBUTTON HALL

4

CHEMISTRY BUILDING

WHITE HALL

ADMINISTRATION BUILDING

B. JONES BUILDING

CARLOS MUSEUM

WOODRUFF LIBRARY

BUSINESS SCHOOL

SCHOOL OF LAW

GLENN MEMORIAL CHURCH

CVS

