# **A Campus in a forest...**

Mercer University engaged the planning and landscape architecture firm HGOR to assess its Atlanta Campus and identify opportunities for new research, educational and environmental uses.

What did HGOR find? To quote from its assessment:

"The sheer size, diversity and location of the land, streams and wetlands afford a unique opportunity for preservation, restoration and education.

But perhaps more important is the opportunity to develop and codify a definitive process for such reclamations within the larger Piedmont Region.

As we continue to explore how functioning urban ecologies enhance our overall quality of life, the development of clear, knowledge-based methodologies and results will be invaluable."

These opportunities are particularly remarkable given that Mercer's Atlanta Campus is situated Inside the Perimeter just off Interstate 85.

Recognizing the site's unique potential, the University is undertaking the planning process to create a 140 acre Urban Forest on the Campus.





SALIX NIGRA

SILKY DOGWOOD CORNUS AMOMUM





EASTERN REDBUD CERCIS CANADENSIS

CARDINAL FLOWER





PELTANDRA VIRGINICA

BROAD BEECH FERN THELYPTERIS HEXAGONOPTERA



HAZEL ALDER ALNUS SERRULATA



VIRGINIA DAYFLOWER COMMELINA VIRGINICA



POSSUMHAW VIBURNUM VIRBURNUM NUDUM



AMERICAN BEECH FAGUS GRANDIFOLIA

The ecological diversity of Mercer's Atlanta Campus includes over 100 native plant species.

# SITE ASSESSMENT

### A TREMENDOUS FOREST ASSET

Developing within the Atlanta region is an emerging network of parks and green spaces. These are used and loved by local communities and serve as an integral asset for a growing urban population. Forested sanctuaries reduce the heat island effect, improve air quality and provide areas for people to learn and recreate. Mercer's Atlanta Campus offers a large resource for developing the Urban Forest concept into reality given the campus' size and relatively pristine natural condition. It thus can offer a destination for various communities to learn about the diverse ecologies that surround them.



## CONNECTIVITY & WATER QUALITY

Initiatives abound within the region to extend and connect a multi-jurisdictional network of multipurpose trails. The success of the Atlanta Beltline, Silver Comet Trail, Big Creek Greenway, Path 400 and numerous other trail projects present an emerging framework approaching 200 miles. Mercer's site can add to this network since stream corridors, due to their connected nature and gentle gradients, are ideal for the inclusion of trails.

The site also is of unique significance because it is strategically located within the upper region of the Peachtree Creek watershed at the confluence of Henderson Mill Creek and the North Fork of Peachtree Creek. It thus includes over two miles of major streams that function as dynamic components of a green infrastructure that enhances water quality and groundwater recharge for the entire watershed prior to reaching the Chattahoochee River.



# ECOLOGICAL ZONES

The Campus boasts six distinct ecological zones including Mafic Forest, Mesic Forest, Oak Pine Hickory Forest, Forested Floodplain, Shrub and Herbaceous Wetland, and Seepage Wetland.



This forest is less acidic than the majority of Georgia Piedmont forests and can be identified by certain trees and shrubs. Indicator canopy trees include White Oak, Post Oak, and Hickories, while understory trees include Carolina Buckthom, Redbud, and Alternate Leaf Dogwood.



These floodplains are relatively flat areas adjacent to streams that may occasionally flood, however; the flooding event is too infrequent to contain standing water for any great length of time. As such, they tend to be more dry than wet, but fertile soils and above average moisture provide an environment that many plants find favorable.



In the Piedmont region, mesic forests are defined as forests with a rich canopy usually dependent on a healthy profile of topsoil and they often have a north-facing slope.



These areas are dominated by shrubs and grasses with a water source that is fairly constant and the beaver dam (on the Mercer site) maintains a permanent pool resulting in a shallow body of water. Many aquatic forbs and grasses thrive in this sunny condition and wetland shrubs occupy isolated uplands and marginal edges of the wetland.



Side slopes with a southern or western orientation or even low ridges will have this type of forest. It is still typically found with fairly healthy topsoil layers, but the orientation and elevation create a dryer, sub-mesic environment.



Seepage wetlands are wetland areas outside of a floodplain. They are typically areas adjacent to the toe of a slope or in a ravine, bordered by upland, where water seeps out from a springhead and saturates the surrounding areas.

### Throughout the nation, there is a growing emphasis on re-establishing functioning eco-systems within urban areas as green infrastructure.

Green infrastructure enhances urban ecology by utilizing natural processes to filter pollutants, lower area temperatures and offer essential wildlife habitat.

In particular, preserved stream corridors are essential in combating soil erosion, mitigating storm water flows and enhancing water quality.

Green spaces therefore provide essential functions for healthy living in an urban environment.

Mercer's Atlanta Campus offers a unique opportunity to establish best practice techniques for protecting and improving greenways and riparian environments, and can encourage similar efforts across the larger watershed and region.

Mercer University's mission is to teach, to learn, to create, to discover, to inspire, to empower and to serve.

www.mercer.edu/



BUTTONBUSH CEPHALANTHUS OCCIDENTALIS



MOCKERNUT HICKORY CARYA TOMENTOSA





PIEDMONT AZALEA RHODODENDRON CANESCENS

WHITEBARK MAPLE ACER LEUCODERME



MORUS RUBRA



SPOTTED TOUCH-ME-NOT IMPATIENS CAPENSIS



PAINTED BUCKYEYE AESCULUS SYLVATICA



RED MAPLE ACER RUBRUM



COMMON SILVERBELL HALESIA TETRAPTERA



LARGE SEDGE CAREX LURIDA