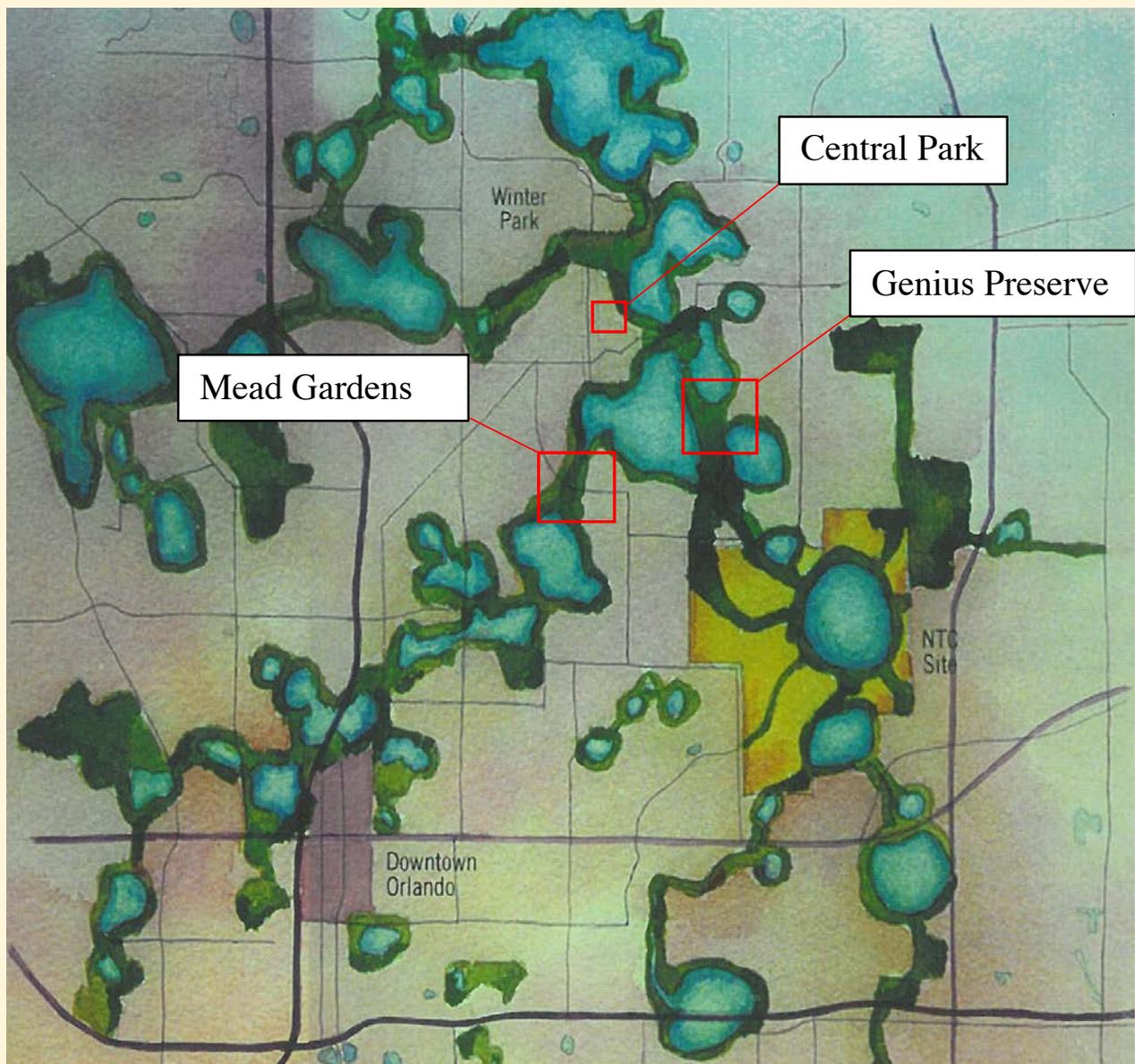


Native Landscapes of Winter Park



Edited by Ellie Rushing and Blake Martin

Introduction

Bruce Stephenson

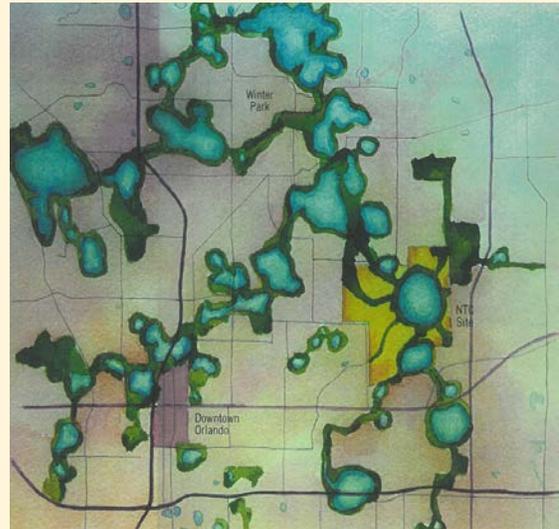
Central Florida is blessed with a series of large, definitive parks stretching from the Wekiva River to the headwaters of the Everglades. Well-studied preserves such as the Wekiva GeoPark offer exemplary models for re-creating native landscapes in urban areas. Over the past 15 years, remnants of natural habitats in Winter Park's Genius Preserve, Central Park, and Mead Gardens have been expanded to re-introduce native plants and promote biodiversity. This report documents these projects, which were the focus of a Rollins College civic engagement course, **Nature in the City** (Fall 2017).

Henry David Thoreau introduced the idea that wild nature and urban culture should co-exist. "The story of Romulus and Remus being suckled by a wolf is not a meaningless fable. The founders of every state which has risen to eminence have drawn their nourishment and vigor from a similar wild source."¹

Thoreau's premise remains vital. It informed a central text in **Nature in the City**, Richard Louv's best selling book, *Last Child in the Woods: Saving our Children from Nature Deficit Disorder*.

Louv believes it is essential to inject wild nature in our cities, and envisions a system of "homegrown national parks" that will turn cities into "incubators of biodiversity." Yards and public spaces filled with native plants could tie into a system of natural corridors. In addition to aiding species migration, this investment would inject "life and meaning" into a desensitized environment.²

Winter Park offers a hint of Louv's vision. The following pages document the efforts to restore three definitive Central Florida landscapes: wetlands and littoral areas, mesic oak habitat, and xeric pine uplands. Most important, the student's analysis of these sites merged art and science—the essence of the liberal arts—to document a nature aesthetic. The landscape is the barometer of our civic virtue and defining beauty, as the healthy function of the natural environment, will produce cities that sustain life and nourish the soul. Harmonizing our lives with nature will not only unite a free people, it will ensure our survival. For "in wildness," Thoreau wrote, "is the preservation of the World."³

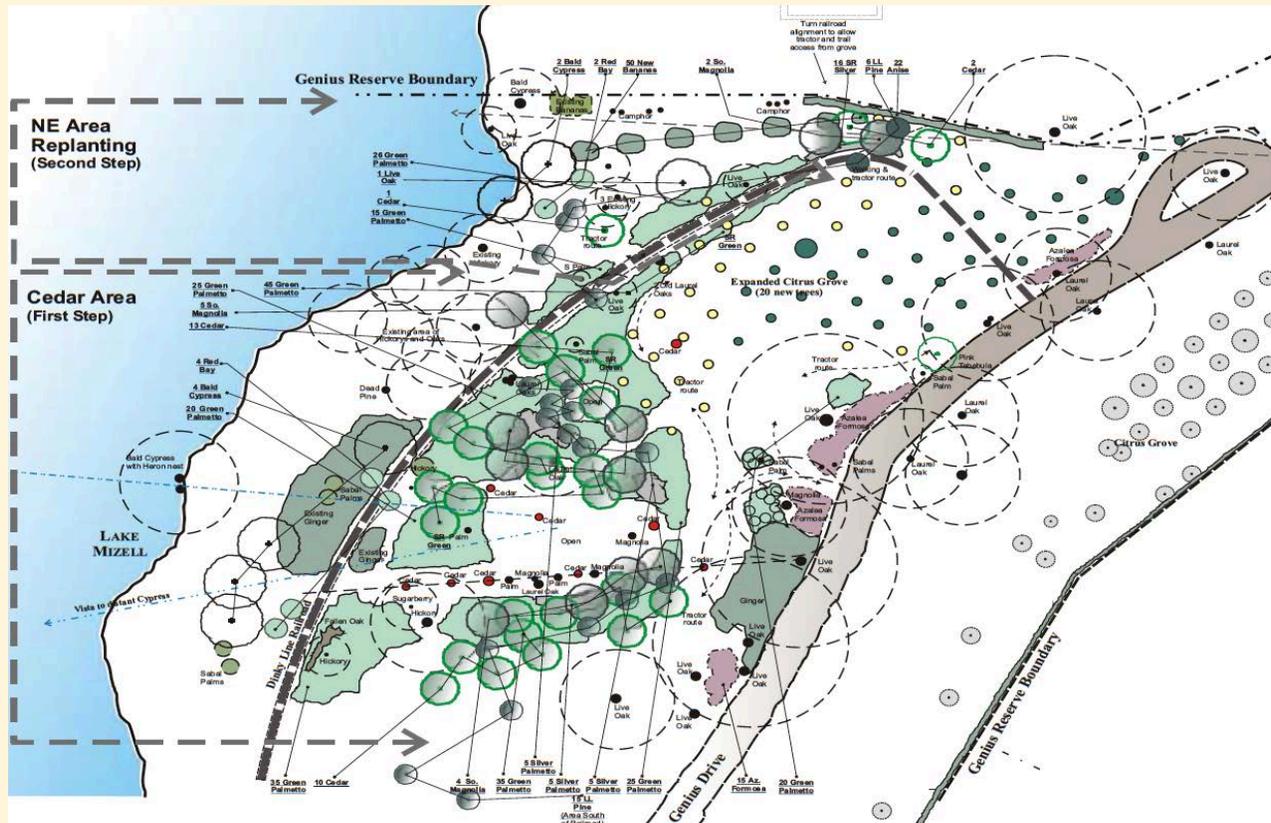


100-year park plan centering on Winter Park, Fla.

1. Henry David Thoreau, "Walking," *The Atlantic* (May 1862).
2. Richard Louv, *The Nature Principle: Reconnecting with Life in a Virtual Age* (2012).
3. Thoreau, "Walking."

Genius Preserve

Cedar Grove Restoration



Restoration plan, Michael Design Associates.



Restored Mesic Oak habitat.

Genius Preserve: Cedar Grove

Mesic Oak Habitat

The Genius Preserve is home to a mesic oak habitat that consists of a diverse system of vegetation. From well-rounded and mature evergreen hardwood to palm forest, the soil of the habitat is infrequently flooded; however, it is considered to be both wet and dry depending on the season. Mesic oak habitats are generally located near rivers, lakes, wetlands, sinkholes, depressions or floodplains, primarily because this area is protected from wildfires. The soil throughout the habitat is generally sand mixed with organic matter and leaf deposits. These leaf deposits are what retain large amounts of moisture because of the vast amount of shade; however, these areas are still well-drained. Specifically within the Genius Preserve, live oak and palmetto trees dictate the high canopy, while the mid-canopy consists of the plum tree, magnolia, cedar, and hickory trees. The low canopy consists of native coffee, coontie, Beautyberry and sable palms. The Genius Preserve ensures that, at the very least, a segment of mesic oak habitat will remain native in Florida while maintaining its natural integrity.



Remnant cedar tree.

Upper Canopy

Live Oak



Mid-Canopy

Cedar



Cedar trees and Red Tailed Hawk.

Sabal Palm



Mid-Canopy

Magnolia



Hickory



Sub-Canopy

Plum



Coral Bean



Shrubs & Ground Cover

Beauty Berry



Blue Porter Weed



Coontie



Native Coffee



Saw Palmetto



Predatory Wildlife



Red Fox



Red Tailed Hawk

Education and Ecological Restoration

The Genius Preserve is an exercise in native and historical landscape restoration. A comprehensive management plan prepared for the Morse Genius Foundation identifies how to protect and restore the cultural aesthetic of “Old Florida.” Invested in this working laboratory, students learn how to advance the ecological health of the landscape and foster landscape coherence. Rollins students work with a living model of sustainability to bridge the gap between civilization and the natural environment, while making a connection to their liberal arts education.

Before starting restoration projects, students analyze the University of Wisconsin Arboretum, the nation’s longest on-going restoration project. Next, they study healthy mesic oak habitats before preparing restoration plans for designated sites. The Foundation oversees the removal of exotic species and students provide the labor for planting native species. Once a site has been restored, the students monitor the area and devise a management plan that evolves as conditions change and information is collected.



Rollins students on Genius Drive with Dr. Stephens. Summer 2003.

Mead Gardens: Nature Oasis

Mead Gardens enhances every visitors' well-being. The park offers an escape into nature where there is an array of wildlife. This diverse habitat is home to freshwater turtles, gopher tortoises, North American river otters, snakes, and over a hundred bird species per year visit the area. Mead Gardens also offers an opportunity to experience nature. Summer camps are particularly important for younger generations; it is the anecdote to what best-selling author, Richard Louv calls, *Nature Deficit Disorder*.



North American River Otter



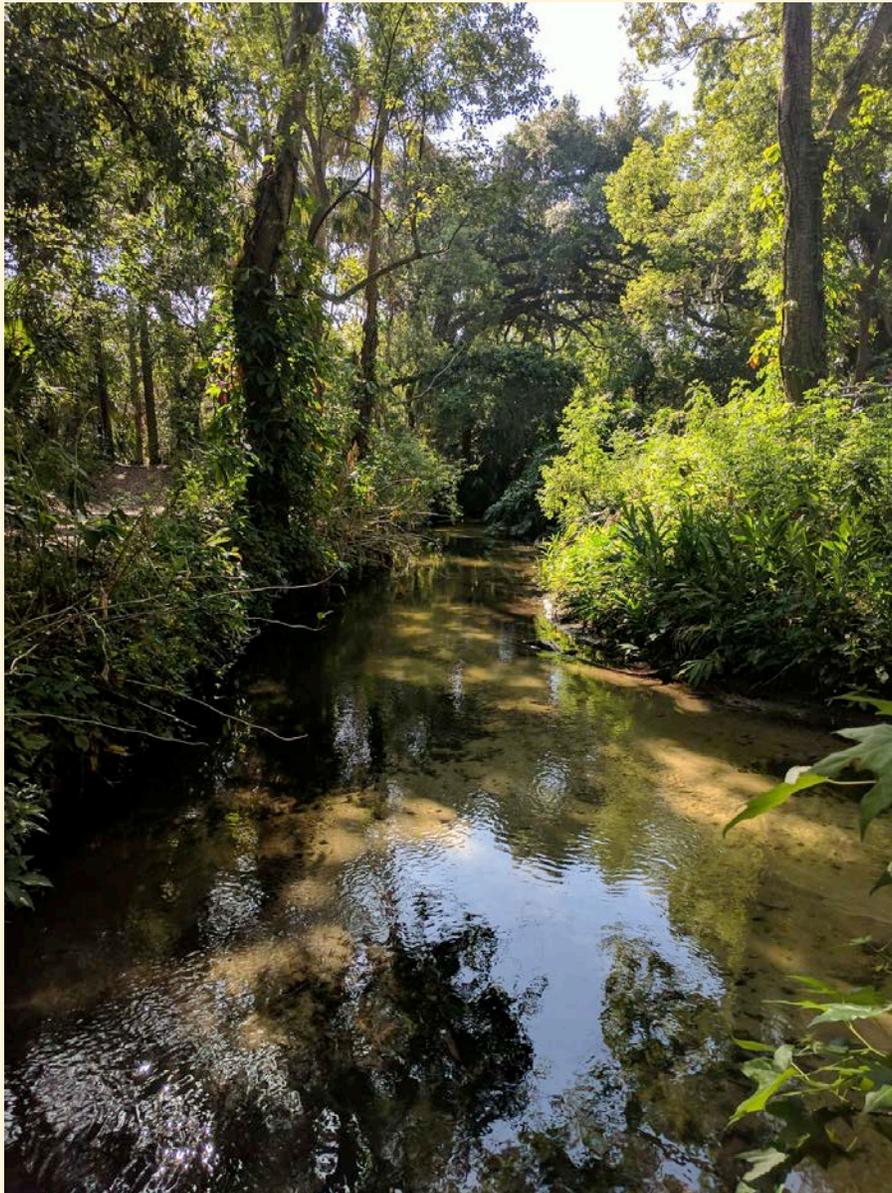
Soft Shell Turtle



American snapping turtle

Sustaining a Livable Environment: the Role of Wetlands

Mead Gardens encompasses a series of freshwater wetlands that are integral to Central Florida. Wetlands usually have standing water during at least part of the year but they are populated with plants that can thrive under conditions of saturated soils and low dissolved-oxygen rates. The bottoms of many wetlands, especially marshes, are covered with decayed plant material that can accumulate over time from brown peat or black muck soils, which define the wetlands in Mead Gardens.



Howell Creek.

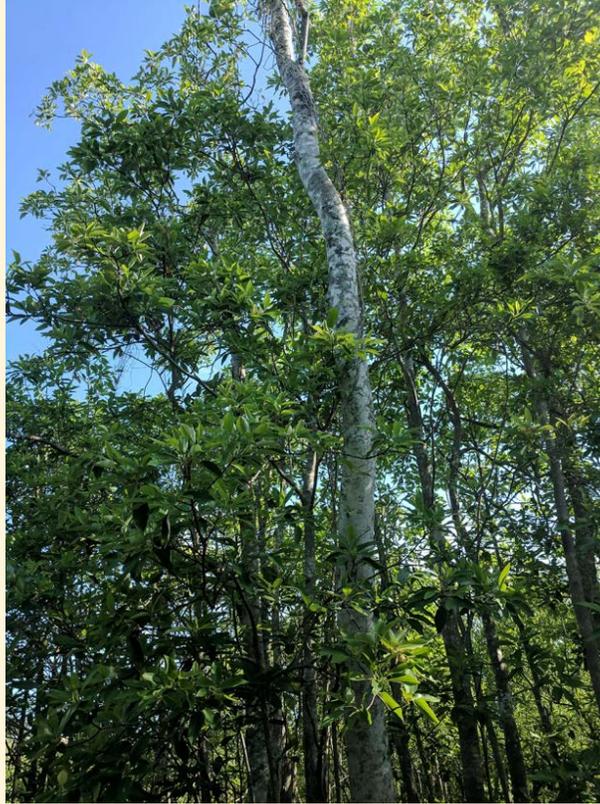
Upper Canopy

Cypress



Mid-Canopy

Bay



Swamp Maple

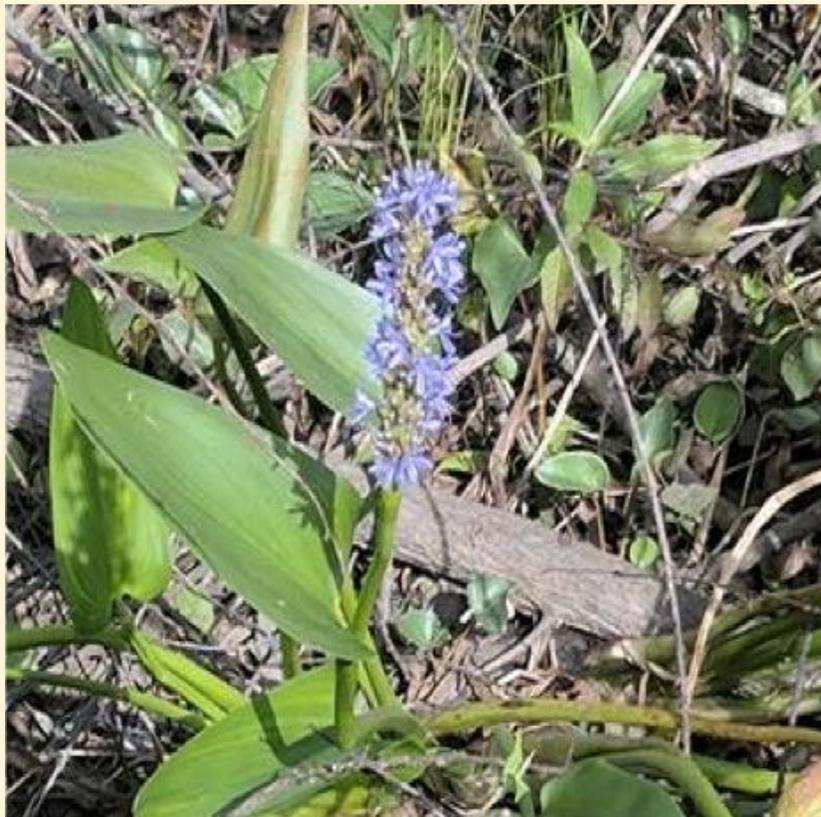


Emergent Aquatics

Duck Potato



Pickerel Weed



Storm Water Retention

Mead Gardens was engineered to filter storm water through a series of storm drains and into three clay bottom lakes. The first lake consists of dense algae, due to large amounts of nitrogen and phosphorous, causing for low quality of water.

The filtering of pollutants in the second and third lake reduce algae concentrations as the water is further filtered before flowing into a small creek.

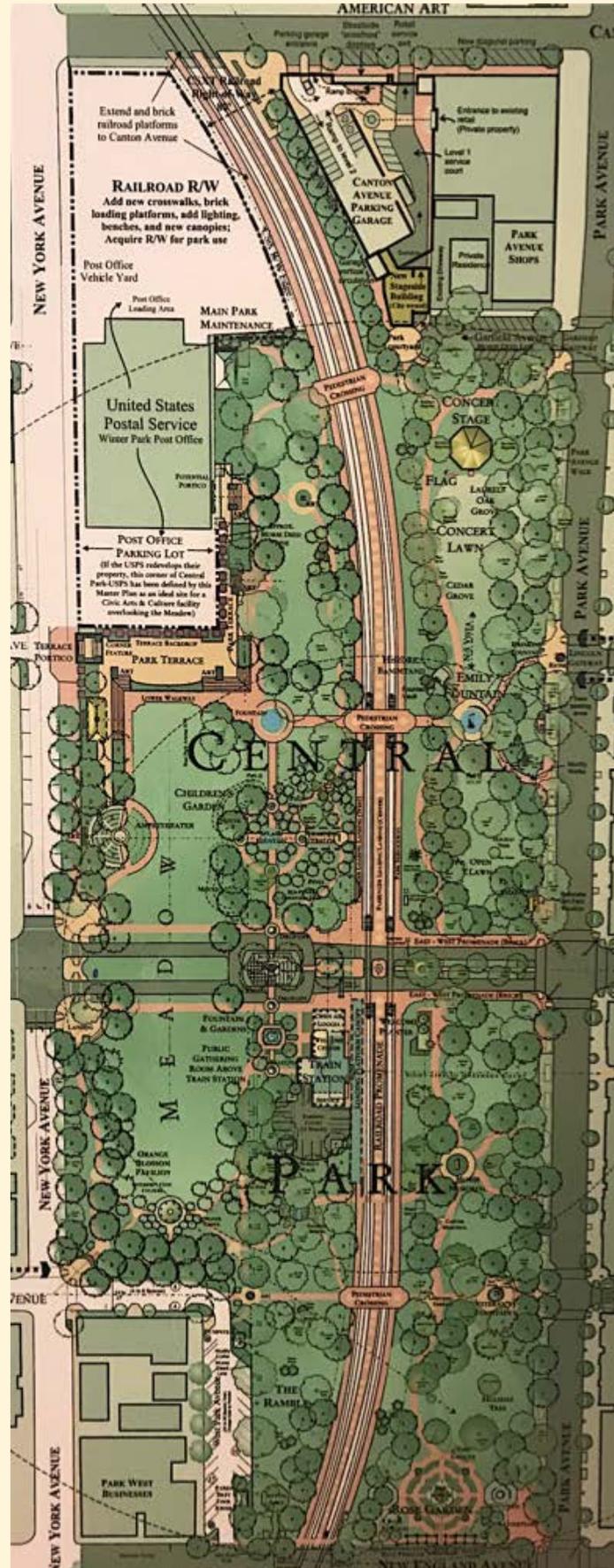


First retention pond.



Second and third retention ponds.

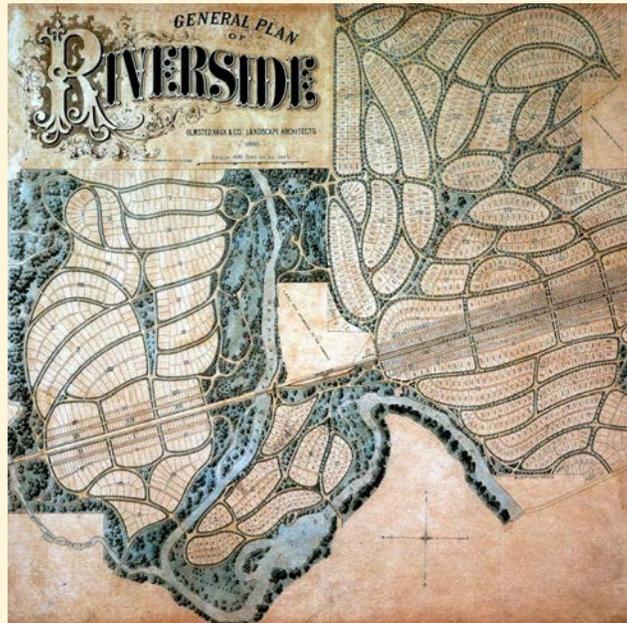
Central Park



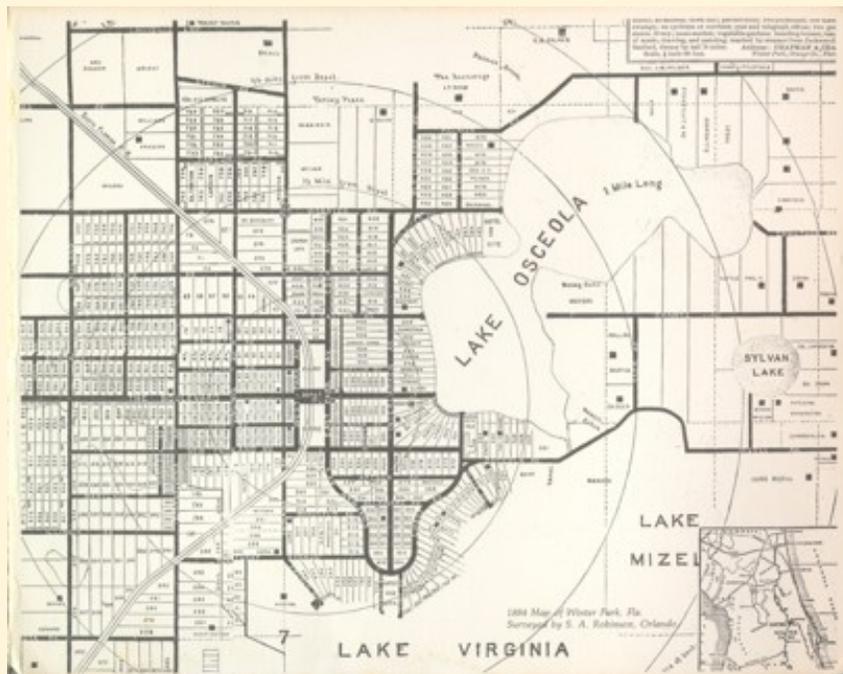
Master Plan, Michael Design Associates.

Central Park

Frederick Law Olmsted designed Riverside, Ill. to be a prototype suburb. Winter Park followed the model, as both towns have a 'Central Park' that is the focal point of the town. This provides easy access for all residents as they can travel the winding paths of the parks while encouraging both neighborly and gregarious behavior within the community. Both parks are close to residential areas and set a precedent for incorporating nature into suburban life. Riverside and Winter Park both follow Olmsted's structure of a how a city should incorporate nature.



Frederick Law Olmsted plan, 1867.



Winter Park city plan 1883.

Central Park Train Station

Winter Park and Riverside's Central Parks both host rail stations, which allows travelers to step off the train into an iconic, pastoral landscape.



Winter Park train station.



Riverside train station.

Sandhill Habitat of Central Park

Originally Central Park was a Sandhill habitat. Today such places are rare because they are well-drained and ideal for development.

Deep, dry, sandy soils—formed as dunes when sea levels were higher—create Sandhill habitats in upland sites throughout the southeastern United States. The canopy tree is the longleaf pine.

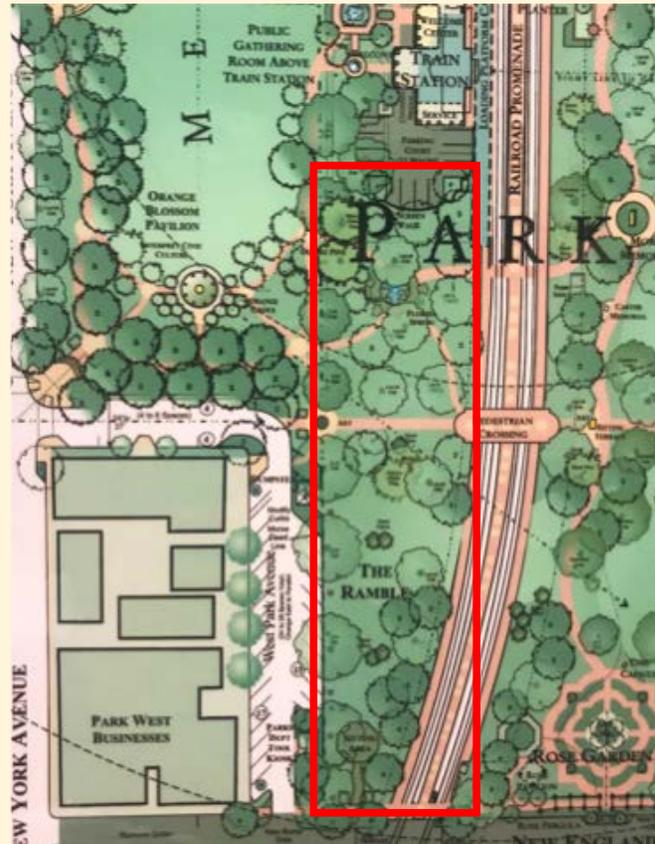
Sandhill ecosystems are highly diverse with an understory that includes grasses and perennials, several of which—like Gopher Apple are endemic occurring nowhere else but Florida.



Central Park 1889 with longleaf pine canopy.

Ramble Native Garden

The Ramble Native Garden was initiated in 2004 with a partnership between the City of Winter Park and the Rollins Environmental Studies Department. The goal is to create a Sandhill habitat that will run from New England Avenue north to the Train Station.



Native garden area outlined in red, Michael Design Associates.



Ramble Native Garden

2004 and 2018



Upper-Canopy

Longleaf Pine



Mature longleaf.



Immature longleaf.

Mid-Canopy

Turkey Oak



Myrtle Oak



Shrubs and Ground Cover

Saw Palmetto



Muhly Grass



Gopher Apple



Native Blueberry



Nature in the City

Civic Engagement



President Grant and Peg Cornwell, April 2016.